3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

FINAL

PERMITTEE NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: April 1, 2018
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Flow	SAMPLE MEASUREMENT				*****	*****	*****				
	PERMIT REQUIREMENT	Report Avg Mo	Report Daily Max	MGD	*****	*****	*****	*****		Continuous	Metered
pH	SAMPLE MEASUREMENT	*****	*****			*****					
	PERMIT REQUIREMENT	*****	*****	*****	6.0 Inst Min	*****	9.0 IMAX	S.U.		1/day	Grab
Total Residual Chlorine	SAMPLE MEASUREMENT	*****	*****		*****						
	PERMIT REQUIREMENT	*****	*****	*****	*****	0.5 Avg Mo	1.0 IMAX	mg/L		1/day	Grab
CBOD5	SAMPLE MEASUREMENT				*****						
	PERMIT REQUIREMENT	7,000 Avg Mo	10,500 Wkly Avg	lbs/day	*****	17 Avg Mo	25 Wkly Avg	mg/L		1/day	24-Hr Composite
CBOD5 Raw Sewage Influent	SAMPLE MEASUREMENT		*****		*****		*****				
	PERMIT REQUIREMENT	Report Avg Mo	*****	lbs/day	*****	Report Avg Mo	*****	mg/L		1/day	24-Hr Composite
BOD5 Raw Sewage Influent	SAMPLE MEASUREMENT		*****		*****		*****				
	PERMIT REQUIREMENT	Report Avg Mo	*****	lbs/day	*****	Report Avg Mo	*****	mg/L		1/week	24-Hr Composite
CBOD20 Percent Removal	SAMPLE MEASUREMENT	*****	*****			*****	*****				
	PERMIT REQUIREMENT	*****	*****	*****	89.25 Min % Removal	*****	*****	%		1/week	24-Hr Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		TELEPHONE		DATE		
TYPED OR PRINTED	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

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BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

FINAL

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		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
	SAMPLE MEASUREMENT		*****		*****	*****	*****				
CBOD20	PERMIT REQUIREMENT	10,500 Avg Mo	*****	lbs/day	*****	*****	*****	*****		1/week	24-Hr Composite
	SAMPLE MEASUREMENT				*****						
Total Suspended Solids	PERMIT REQUIREMENT	12,500 Avg Mo	18,760 Wkly Avg	lbs/day	*****	30 Avg Mo	45 Wkly Avg	mg/L		1/day	24-Hr Composite
	SAMPLE MEASUREMENT		*****		*****		*****				
Total Suspended Solids Raw Sewage Influent	PERMIT REQUIREMENT	Report Avg Mo	*****	lbs/day	*****	Report Avg Mo	*****	mg/L		1/day	24-Hr Composite
	SAMPLE MEASUREMENT	*****	*****		*****						
Total Dissolved Solids	PERMIT REQUIREMENT	*****	*****	*****	*****	1,000 Avg Mo	2,000 Daily Max	mg/L		2/month	24-Hr Composite
	SAMPLE MEASUREMENT		*****		*****						
Oil and Grease	PERMIT REQUIREMENT	6,250 Avg Mo	*****	lbs/day	*****	15 Avg Mo	30 IMAX	mg/L		1/day	Grab
	SAMPLE MEASUREMENT	*****	*****		*****						
Fecal Coliform Oct 1 - Apr 30	PERMIT REQUIREMENT	*****	*****	*****	*****	200 Geo Mean	1,000 IMAX	CFU/ 100 ml		1/day	Grab
	SAMPLE MEASUREMENT	*****	*****		*****						
Fecal Coliform May 1 - Sep 30	PERMIT REQUIREMENT	*****	*****	*****	*****	200 Geo Mean	1,000 IMAX	CFU/ 100 ml		1/day	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
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TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

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BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

FINAL

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ADDRESS 100 East Fifth Street
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WATERSHED 3-G

PA0027103	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
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DMR Effective From: April 1, 2018
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		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Ammonia-Nitrogen May 1 - Oct 31	SAMPLE MEASUREMENT		*****	lbs/day	*****		*****	mg/L		2/month	24-Hr Composite
	PERMIT REQUIREMENT	9,590 Avg Mo	*****		*****	23 Avg Mo	*****				
Ammonia-Nitrogen Nov 1 - Apr 30	SAMPLE MEASUREMENT		*****	lbs/day	*****		*****	mg/L		2/month	24-Hr Composite
	PERMIT REQUIREMENT	28,770 Avg Mo	*****		*****	69 Avg Mo	*****				
Nitrate as N	SAMPLE MEASUREMENT	*****	*****	*****	*****			mg/L		2/month	24-Hr Composite
	PERMIT REQUIREMENT	*****	*****		*****	Report Avg Mo	Report Daily Max				
Nitrite as N	SAMPLE MEASUREMENT	*****	*****	*****	*****			mg/L		2/month	24-Hr Composite
	PERMIT REQUIREMENT	*****	*****		*****	Report Avg Mo	Report Daily Max				
Total Kjeldahl Nitrogen	SAMPLE MEASUREMENT	*****	*****	*****	*****		*****	mg/L		2/month	24-Hr Composite
	PERMIT REQUIREMENT	*****	*****		*****	Report Avg Mo	*****				
Total Cadmium	SAMPLE MEASUREMENT	*****	*****	*****	*****		*****	mg/L		1/month	24-Hr Composite
	PERMIT REQUIREMENT	*****	*****		*****	Report Avg Mo	*****				
Total Copper	SAMPLE MEASUREMENT	*****	*****	*****	*****			mg/L		1/month	24-Hr Composite
	PERMIT REQUIREMENT	*****	*****		*****	0.027 Avg Mo	0.053 Daily Max				

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
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TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

FINAL

PERMITTEE NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: April 1, 2018
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

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PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
	SAMPLE MEASUREMENT	*****	*****		*****		*****				
Total Cyanide	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		1/month	24-Hr Composite
	SAMPLE MEASUREMENT	*****	*****		*****		*****				
Total Lead	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		1/month	24-Hr Composite
	SAMPLE MEASUREMENT	*****	*****		*****		*****				
Total Zinc	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		1/month	24-Hr Composite
	SAMPLE MEASUREMENT	*****	*****		*****		*****				
Chlorodibromomethane	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		1/month	Grab
	SAMPLE MEASUREMENT	*****	*****		*****		*****				
Dichlorobromomethane	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		1/month	Grab
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

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COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Semi-Annually
DMR Effective From: May 1, 2013
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

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PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
PCBs (Dry Weather) Jul 1 - Dec 31	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	pg/L		1/6 months	24-Hr Composite
PCBs (Dry Weather) Jan 1 - Jun 30	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	pg/L		1/6 months	24-Hr Composite
PCBs (Wet Weather) Jul 1 - Dec 31	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	pg/L		1/6 months	24-Hr Composite
PCBs (Wet Weather) Jan 1 - Jun 30	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	pg/L		1/6 months	24-Hr Composit
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103	028
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Annually
DMR Effective From: May 1, 2013
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
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		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
pH	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	S.U.		1/year	Grab
CBOD5	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	mg/L		1/year	Grab
Chemical Oxygen Demand	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	mg/L		1/year	Grab
Total Suspended Solids	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	mg/L		1/year	Grab
Oil and Grease	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	mg/L		1/year	Grab
Total Kjeldahl Nitrogen	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	mg/L		1/year	Grab
Total Phosphorus	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	mg/L		1/year	Grab

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COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

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BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

PRIMARY FACILITY NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103
PERMIT NUMBER

028
OUTFALL NUMBER

MONITORING PERIOD						
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Dissolved Iron	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	mg/L		1/year	Grab
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
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	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

TYPED OR PRINTED

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SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

INSTRUCTIONS FOR COMPLETING DISCHARGE MONITORING REPORTS (DMRs)

General

One or more Discharge Monitoring Reports (DMRs) are attached to your permit for reporting the results of self-monitoring activities as required by your permit. You should make copies of the DMRs for your ongoing use, unless you elect to participate in the Department of Environmental Protection's (DEP's) electronic DMR (eDMR) program (see www.dep.state.pa.us/edmr).

- Reporting frequencies will vary depending on the monitoring frequencies listed in your permit, and are generally monthly, quarterly semi-annually and annually.
- Your reports must be received by DEP on the 28th day of the month following the end of the reporting period.
- Your permit may require submission of DMRs to other agencies, including the U.S. Environmental Protection Agency (EPA).
- If you receive DMRs in the mail from EPA, please discontinue use of DMR Form No. 3800-FM-BPNPSM0462 and begin using EPA's DMRs.
- DMRs will generally include pre-populated information for permittee name and address, facility location, permit number, outfall number, permit expiration date, parameter names, and permit requirements. If you identify any errors on a DMR issued by DEP, please contact the DEP regional office that issued your permit. If you identify any errors on a DMR issued by EPA, please contact DEP's Central Office at 717-787-6744. **DO NOT make changes to DMRs issued to you**.
- You may use computer-generated replicas of Form No. 3800-FM-BPNPSM0462 or of EPA's DMR if you receive prior approval from DEP and EPA. **DEP reserves the right to instruct you to discontinue the submission of computer-generated DMRs if the permit requirements you entered on the form are inaccurate.**

Instructions

1. Enter statistical results into each blank field below the "VALUE" column headers. Results must be reported in the same units shown on the DMR.
2. Sum the total number of excursions or exceedances of permit limits across the row for each parameter and enter the value into the "NO. EX" field. For example, if the permit contains limits of 6.0 S.U. (Minimum) and 9.0 S.U. (Maximum) for pH, and the Minimum and Maximum results are 5.9 S.U. and 9.1 S.U., respectively, enter "2" into the "NO. EX" field.
3. Report the actual sampling frequency and sample type utilized during the reporting period in the fields corresponding to "Frequency of Analysis" and "Sample Type", respectively.
4. Type the name of the principal executive officer (or an authorized agent designated by a principal executive officer) who is taking responsibility for the report, sign the report (should be in ink), enter the telephone number of the responsible individual, and record the date that the report was signed. Mail only original, signed copies of DMRs.
5. In the Comments section at the bottom of the DMR, you may write a brief summary of violations in this section; however, DEP requests that all violations during the monitoring period be reported in more detail on DEP's **Non-Compliance Reporting Form** (3800-FM-BPNPSM0440) and be submitted as an attachment to the DMR. Other uses of the Comments Section include explanations of attachments to the DMR, explanations for the unavailability of data, and brief summaries of issues that have affected operations or effluent quality during the monitoring period. Always consider attaching a letter or separate document to explain your situation in more detail.

No Discharge or No Data Available

If there was no discharge at all from an outfall during the monitoring period, check the "No Discharge" box on the top of the DMR. Complete the information above and below the table and mail the DMR to the appropriate agencies. Be sure to sign and date the DMR.

If there was no discharge of a specific parameter (e.g., if a chlorine limit is in the permit but chlorine was not used for disinfection during the entire reporting period), or if data are not available for a specific parameter for the entire reporting period, do not leave the DMR blank. Instead, report one of the following No Data Indicator (NODI) codes that apply to your situation in the appropriate value field, and **provide an explanation as an attachment to the DMR**:

A Use if you are exempted from monitoring the parameter because of a General Permit condition.

E Use if all samples or results are not available for the reporting period due to equipment failure or because sample collection was overlooked or samples could not be collected for the parameter.

GG Use if your permit requires sample collection and analysis only under certain conditions and those conditions were not met during the reporting period (e.g., report chlorine results only when chlorination system is used).

FF Other: use if there is any reason for the absence of data that is not covered by those above.

If you have at least one result for a parameter, the value should be reported and not a NODI code.

Calculations

The following explains how to calculate statistical values that are commonly required by permits:

Monthly Average – For Loading (lbs/day), sum the total of daily loadings and divide by the number of samples during the month. To calculate the daily loading, multiply the daily concentration (mg/l) by the flow (MGD) on the date of sampling and a conversion factor of 8.34. For Concentration, sum the total of daily concentrations and divide by the number of samples.

Weekly Average – For Loading (lbs/day), sum the total of average daily loadings during each week of the reporting period (beginning on a Sunday and ending on a Saturday) and divide by the number of samples during the week. For Concentration, sum the total of daily concentrations each week and divide by the number of samples. Report the maximum weekly average on the DMR.

Maximum Daily ("Daily Max") – Report the maximum concentration or load measured during a 24-hour period during the reporting period; if multiple measurements are taken daily, include all data in the analysis.

Instantaneous Maximum ("IMAX") – Report the maximum result obtained by a grab sample for a specific pollutant over the entire reporting period covered by a DMR.

Instantaneous Minimum ("Minimum") – Report the minimum result obtained by a grab sample for a specific pollutant over the entire reporting period covered by a DMR.

Total Monthly Load (lbs) – Sum the total of average daily loadings, divide by the number of samples during the month, and multiply by the number of days in the month.

Geometric Mean – Report the average of a set of *n* sample results given by the *n*th root of their product. If any result is zero (0), substitute 1 for the calculation. For example, five samples were analyzed with the following results: 20, 300, 400, 500, and 0. The calculation of geometric mean is as follows (note that you will need to use the power function on a calculator):

$$\sqrt[5]{20 \cdot 300 \cdot 400 \cdot 500 \cdot 1} = \sqrt[5]{1{,}200{,}000{,}000} = (1{,}200{,}000{,}000)^{1/5} = \mathbf{65}$$

Non-Detect Data

Conventional and Toxic Parameters

For calculating average values of data sets in which there are some "detections" (results at or above the laboratory reporting limit) and some "non-detect" data (results reported below the laboratory reporting limit), use the reporting limit for non-detect data. In other words, ignore the less than (<) symbol for statistical calculations and include the < symbol with the statistical result if there is at least one non-detect result in the data set. For example, four samples were analyzed with the following results: < 1.0, 2.0, < 1.0, and 1.0. The average statistical result is < 1.3.

Where the permit includes an effluent limitation for a parameter that is less than the most sensitive detection limit available, and the laboratory reports a value at or below the lowest level specified by the permit, you may use zero (0) in the calculation in lieu of the reporting limit, if the parameter is identified in 25 Pa. Code Chapter 16, Appendix A, Tables 2A and 2B. In general, parameters with limitations that are less than the most sensitive detection limit will be identified in Part C of the permit, if applicable.

Bacteria Parameters

Report all "non-detect" (e.g., < 2) and "too numerous to count" (TNTC) (e.g., > 2,000) results on DMR supplemental forms as reported by the laboratory. Do not report "TNTC" on supplemental forms, but instead report a value qualified with the">" symbol. Where a data set includes one or more "non-detect" and/or TNTC results, calculate the geometric mean by ignoring qualifying symbols, but report the value with the symbol. If a data set includes both ">" and "<" qualifiers, the ">" qualifier takes precedence for reporting. For all "non-detect" values, specify in the Comments section of the DMR the maximum volume filtered at the laboratory.

Example 1 – For results are determined, < 2, 10, 20, and 30. The geometric mean should be reported as $< (2 \bullet 10 \bullet 20 \bullet 30)^{0.25} = < 10$. Specify the maximum volume filtered for the < 2 result in the DMR Comments.

Example 2 – Three results are determined, < 2, 1,000, and > 2,000. The geometric mean should be reported as $> (2 \bullet 1{,}000 \bullet 2{,}000^{0.333} = > 158$.

Rounding and Precision

Statistical values reported on the DMR should be rounded to the same number of decimal places as the limit for the parameter as set forth in the permit. If the permit does not contain a limit but requests monitoring only, statistical values for concentration results should be rounded to the maximum number of decimal places in the data set as reported by the laboratory or the instrument used for analysis. If mass loads must be reported and there is no limit, round statistical values to the nearest whole number, unless the calculated number is less than one, in which case the value should be rounded to one significant figure (e.g., 0.1, 0.05, etc.). If the number you are rounding is followed by 5, 6, 7, 8, or 9, round the number up, otherwise round down.

The documents "Discharge Monitoring Reports Overview and Summary" (3800-BK-DEP3047) and "Management of Non-Detect Results for Discharge Monitoring Reports" (3800-FS-DEP4262) contain more information and are incorporated by reference. These documents are available on DEP's website.

Supplemental Reporting Forms Checklist

Check Box	Supplemental Form Name and No.
☒	Daily Effluent Monitoring (3800-FM-WSFR0435)
☒	Influent & Process Control (3800-FM-WSFR0436)
☒	Hauled in Municipal Wastes (3800-FM-WSFR0437)
☒	Biosolids Production and Disposal (3800-FM-WSFR0438)
☐	Chemical Additives Usage (3800-FM-WSFR0439)
☒	Noncompliance Reporting Form (3800-FM-WSFR0440)
☒	CSO Monthly Summary Report (3800-FM-WSFR0441)
☒	CSO Detailed Report (3800-FM-WSFR0442)
☐	Groundwater Monitoring Data Report (3800-FM-WSFR0443)
☐	Nutrient Monitoring (3800-FM-WSFR0444)
☐	Nitrogen Budget (3800-FM-WSFR0445)
☐	Phosphorus Budget (3800-FM-WSFR0446)
☐	Annual Nutrient Summary (3800-FM-WSFR0447)
☐	TMDL Annual Load Summary (3800-FM-WSFR0448)
☐	Spray Irrigation Systems (3800-FM-WSFR0449)
☒	Hauled in Residual Wastes (3800-FM-WSFR0450)
☐	Surface Water Monitoring Data Report (3800-FM-WSFR0461)
☐	Instructions for Completing DMRs (3800-FM-WSFR0463)
☒	Lab Accreditation Form (3800-FM-WSFR0189)
☒	Storm Water Annual Inspection Form (3800-FM-WSFR0083v)
☒	Storm Water Additional Information (3800-FM-WSFR0083t)

Re 30 (WP)

INSTRUCTIONS FOR COMPLETING DAILY EFFLUENT MONITORING SUPPLEMENTAL REPORT

Use this form to report daily monitoring results for the parameters that must be monitored in effluent for compliance with the permit. Results for influent parameters should be reported on Form 3800-FM-WSFR0436.

1. Enter Facility Name, Municipality, County, Watershed No., Laboratories, Month, Year, NPDES Permit No., Outfall No., and Permit Expiration Date (it is noted that this information may be pre-populated if you have received this form with your permit). For Laboratories, list the names of all laboratories where samples were analyzed during the month, including on-site analysis.

2. In the column headers, below "Effluent Parameters," enter the names of parameters in the permit. Since limited space is provided, abbreviation may be necessary. If there are more parameters for an outfall than columns provided on the form, attach an additional sheet.

3. Below parameter names, and to the right of "Q" (Qualifier) column headers, enter the units associated each parameter (it is noted that this information may be pre-populated if you have received this form with your permit).

4. Enter monitoring results for parameters in the rows corresponding to the day of the month in which samples were collected. Enter results exactly as reported by the laboratory, or if measured with on-site equipment, to the level of precision recommended by the equipment manufacturer. Enter data qualifiers such as "<," ">," "J," and others in the "Q" column.

5. Calculate and report average values at the bottom of the table in accordance with the DMR Instructions (3800-FM-WSFR0463). Note – for bacteria, calculate and report the geometric mean value.

6. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0435 7/2009

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
DAILY EFFLUENT MONITORING

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G
Laboratories:

Month: Year:
NPDES Permit No.: PA0027103 Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on

Day	Effluent Parameters																	
	Flow		pH		TRC		CBOD5		CBOD20 % Removal		TSS		Total Dissolved Solids		Oil and Grease		Fecal Coliform	
	Q	*MGD*	Q	*S.U.*	Q	*mg/L*	Q	*mg/L*	Q	*%*	Q	*mg/L*	Q	*mg/L*	Q	*mg/L*	Q	*CFU/100 ml*
1																		
2																		
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I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Signature:
Title: Date:

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
DAILY EFFLUENT MONITORING

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G
Laboratories:

Month: Year:
NPDES Permit No.: PA0027103 Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on

Day	Effluent Parameters																	
	Ammonia		Nitrate		Nitrite		TKN		Total Cadmium		Total Copper		Total Cyanide		Total Lead		Total Zinc	
	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L
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Prepared By: Signature:
Title: Date:

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
DAILY EFFLUENT MONITORING

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G
Laboratories:

Month: Year:
NPDES Permit No.: PA0027103 Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on

Day	Effluent Parameters																	
	Chlorodibromo-methane		Dichlorobromo-methane		PCBs (Dry Weather)		PCBs (Wet Weather)		CBOD20									
	Q	*mg/L*	Q	*mg/L*	Q	*pg/L*	Q	*pg/L*	Q	*lbs/day*	Q		Q		Q		Q	
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Prepared By: Signature:
Title: Date:

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

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INSTRUCTIONS FOR COMPLETING INFLUENT & PROCESS CONTROL SUPPLEMENTAL REPORT

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. For **Influent**, enter daily average Influent Flow (MGD) (if an influent flow meter is in use), daily influent BOD_5 or BOD_5 concentrations (mg/l) and loads (lbs), and daily influent TSS concentrations (mg/l) and loads (lbs). Calculate loads by multiplying daily average flow (MGD) by daily average concentration (mg/l) and a conversion factor of 8.34. If an influent flow meter is not in use, you may use results from an effluent flow meter.

3. For **Process Control**, enter daily average Mixed Liquor Suspended Solids (MLSS) (mg/l) and daily average Aeration Dissolved Oxygen (DO) for aerobic biological treatment systems, and total daily Sludge Wasted (removed from biological treatment), in gallons, for all treatment system types. If a parameter does not apply to your facility, leave the column blank. Information for other parameters such as Return Activated Sludge (RAS) Rate, Recirculation Rate (for fixed media treatment systems), Sludge Blanket Thickness, Sludge Volume Index, and others may be requested by the DEP office that issued the permit.

4. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0436 Rev. 8/2011

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT – INFLUENT & PROCESS CONTROL

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	Influent					Process Control				
	Flow (MGD)	BOD5 (mg/l)	BOD5 (lbs)	TSS (mg/l)	TSS (lbs)	Aeration MLSS (mg/l)	Aeration DO (mg/l)	Sludge Wasted (gallons)		
1										
2										
3										
4										
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Max										

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____
Title: _____ Date: _____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

INSTRUCTIONS FOR COMPLETING HAULED IN MUNICIPAL WASTES SUPPLEMENTAL REPORT

This form is intended for documenting the receipt of municipal wastes including sewage sludge, septage and other wastewaters hauled in from other facilities for processing and/or disposal at your facility. This form should not be used for reporting receipt of residual wastes (e.g., food processing wastes, oil and gas wastewater, landfill leachate, etc.) - please use Form 3800-FM-WSFR0450 for reporting this information.

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. For septage, sludge and other wastewaters (specify type in the space provided), record the daily volume received in gallons, the daily BOD_5 concentration (average), the daily BOD_5 load in lbs (average), and the disposal location. For disposal location, specify the plant location or tank receiving hauled in wastes (e.g., headworks, primarily clarifier, digester, etc.).

3. Determine daily BOD_5 concentrations in mg/l by sampling loads in accordance with the permit or otherwise as determined by the facility. Periodic sampling of loads is encouraged to improve confidence in reported results.

4. Calculate the average, daily total and monthly total values and report the values in the spaces provided.

5. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0437 8/2009

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT – HAULED IN MUNICIPAL WASTES

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	SEPTAGE				SLUDGE				OTHER (specify):				DAILY TOTALS	
	Gallons	BOD_5 (mg/l)	BOD_5 (lbs)	Disposal Location	Gallons	BOD_5 (mg/l)	BOD_5 (lbs)	Disposal Location	Gallons	BOD_5 (mg/l)	BOD_5 (lbs)	Disposal Location	Gallons	BOD_5 (lbs)
1														
2														
3														
4														
5														
6														
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8														
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26														
27														
28														
29														
30														
31														
Avg												Monthly Totals:		

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

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INSTRUCTIONS FOR COMPLETING SEWAGE SLUDGE / BIOSOLIDS SUPPLEMENTAL REPORT

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

Biosolids Production Information

2. For each off-site removal event for liquid sewage sludge or biosolids and for dewatered sewage sludge or biosolids, and for each event where dewatered sewage sludge or biosolids are incinerated on-site, list the date of the event, identify the gallons (liquid) or tons (dewatered) removed or incinerated and the percent solids (e.g., 10%, 20%, etc.) Report only sewage sludge or biosolids that have been removed from the plant digesters and other solids which have been **permanently** removed from the treatment process. Do **not** include sewage sludge or biosolids from other facilities that are processed at your facility. (If there were no off-site removal events during the month, check the box above the table).

   Calculate dry tons for liquid sewage sludge or biosolids by multiplying the volume (gallons) by the percent solids and by a conversion factor of 0.0000417. For example, if 2,500 gallons of liquid biosolids is removed, and the percent solids is 3.0%, dry tons is calculated as:

   2,500 gallons x 3.0% x 0.0000417 = 0.31 dry tons

   Calculate dry tons for dewatered sewage sludge or biosolids by multiplying the tons dewatered by the percent solids and by a conversion factor of 0.01. For example, if 5 tons of dewatered biosolids is removed, and the percent solids is 50%, dry tons is calculated as:

   5 tons x 50% x 0.01 = 2.5 dry tons

   The **% Solids** of liquid or dewatered sewage sludge or biosolids must be determined periodically through laboratory testing. Do not estimate or guess this value. An acceptable test method is method 2540B in *Standard Methods for the Examination of Water and Wastewater*, 18th edition, where samples are dried at 103-105°C. Other references such as ASTM may have equivalent tests which are also acceptable.

Biosolids and Incinerator Ash Disposal and Beneficial Use Information

3. Report sewage sludge, biosolids, and ash disposal and beneficial use information by disposal/application site. There are columns for four possible sites per month - if more sites are needed, attach additional pages. For each Site Name, listed at the top of the column, enter the Municipality and County of the site, the DEP Permit No. (i.e., Biosolids permit number for land application, landfill waste management permit number, etc.), Type of Material (sewage sludge, biosolids, or incinerator ash), Dry Tons Applied/Disposed at the site for the month, Type of Disposal/Use (e.g., reed beds, agricultural utilization, composting, landfill, other treatment plant, etc.) and the name of the hauler (company or individual name).

4. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0438 Rev. 7/2010

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
SEWAGE SLUDGE / BIOSOLIDS PRODUCTION AND DISPOSAL

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103
Renewal application due **180 days** prior to expiration
This permit will expire on _____

SEWAGE SLUDGE/BIOSOLIDS PRODUCTION INFORMATION (Identify each off-site removal event and incineration event)

☐ Check here if there were no off-site removal events during the month

Date	Liquid Sewage Sludge/Biosolids Hauled Off-site			Dewatered Sewage Sludge/Biosolids Hauled Off-site			Sewage Sludge/Biosolids Dewatered and Incinerated On-site		
	Gallons	% Solids	Dry Tons	Tons Dewatered	% Solids	Dry Tons	Tons Dewatered	% Solids	Dry Tons
		TOTAL:			TOTAL:			TOTAL:	

SEWAGE SLUDGE/BIOSOLIDS AND INCINERATOR ASH DISPOSAL AND BENEFICIAL USE INFORMATION
(Identify all sites where sewage sludge/biosolids or ash were disposed or land applied)

Site Name				
Municipality				
County				
DEP Permit No.				
Type of Material*				
Dry Tons Applied/Disposed				
Type of Disposal/Use*				
Hauler Name				

*See Instructions for explanation

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

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INSTRUCTIONS FOR COMPLETING NON-COMPLIANCE REPORTING FORM

Use this supplemental form to report all permit violations and any other non-compliance that may endanger health or the environment, in accordance with your permit. Complete all sections that apply. If you are reporting violations of permit limits, monitoring requirements or schedules that do not pose an immediate threat to health or the environment, you may attach this form to the Discharge Monitoring Report (DMR). If you are reporting other non-compliance events, and the deadline for a written report (e.g., 5 days) does not coincide with your submission of the DMR, this form should be submitted separately to the Department by the reporting deadline set forth in the permit.

If you are unsure of whether an incident constitutes non-compliance that may endanger health or the environment, it is recommended that you notify the Department verbally as soon as possible after you become aware of the incident. Title 25, Pa. Code §§ 91.33 and 91.34 (regarding incidents causing or threatening pollution and activities utilizing pollutants, respectively), in part requires immediate notification by telephone to the Department of pollution incidents, remediation, and may require an additional report on the incident or plan of pollution prevention measures.

Instructions:

1. Enter the name of the facility, the municipality and county where it is located, the month and year when violations occurred, and the NPDES or WQM permit number for the facility.

2. If there were violations of permit effluent limitations during the month, check the box next to "Violations of Permit Effluent Limitations." (Note – if using the electronic version of this form, check the boxes first, and then select Tools – Unprotect Document to enter additional information). Enter the date of the violation (if a violation of a minimum or maximum limit, the date of sample collection, or if a violation of an average limit, the end of the monitoring period), the parameter name, the permit limit and units, the statistical code (e.g., "MIN", "MAX", "MO AVG", etc.), the measured result and units, the cause of the violation and the corrective action taken. **If there are more than two violations during the monitoring period and/or if the space provided is insufficient to explain the cause or corrective action, please attach additional pages.**

3. If there are Sanitary Sewer Overflow (SSO) discharges or other unauthorized discharges from the facility (e.g., spills, leaks, etc.) that enter or have the potential to enter waters of the Commonwealth, including groundwater, notify DEP by phone as soon as possible, and document the discharge on this form by checking the box next to "Sanitary Sewer Overflows and Other Unauthorized Discharges." Record the event (discharge) date, the substance discharged (e.g., sewage, on-site chemicals, etc.), the location where the discharge occurred (e.g., manhole number, pump station name, equipment description, etc.), the volume discharged (gallons), the approximate duration of the discharge (hours), the receiving waters (name of stream or groundwater), the impact on the receiving waters, if observed (e.g., solids deposition, foam, fish kill, etc.), the cause of the discharge, and the date on which the Department was verbally notified. **If there are more than two discharge events during the monitoring period and/or if the space provided is insufficient to explain the discharge, please attach additional pages.**

4. If there are other violations of the permit, check the box next to "Other Permit Violations," and check the appropriate box that describes the violation type. If not identified on the form, check the box next to "Other" and provide a written explanation. **If the space provided is insufficient to explain the violation, please attach additional pages.**

5. Type your name and title and sign and date the form after reading the certification statement.

If you have questions about completing this form, contact the Water Management Operations Section of the Department in your region:

Southeast Region – (484) 250-5970
Northeast Region – (570) 826-2553
Southcentral Region – (717) 705-4707
Northcentral Region – (570) 327-3661
Southwest Region – (412) 442-4000
Northwest Region – (814) 332-6942

3800-FM-WSFR0440 Rev. 7/2010

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

NON-COMPLIANCE REPORTING FORM

Use this supplemental form to report all permit violations and any other non-compliance that may endanger health or the environment, in accordance with your permit. Complete all sections that apply. If you are reporting violations of permit limits, monitoring requirements or schedules that do not pose an immediate threat to health or the environment, you may attach this form to the Discharge Monitoring Report (DMR). **Title 25, Pa. Code §§ 91.33 and 91.34 (regarding incidents causing or threatening pollution and activities utilizing pollutants, respectively), in part requires immediate notification by telephone to the Department of pollution incidents, remediation, and may require an additional report on the incident or plan of pollution prevention measures.** If you are reporting other non-compliance events, and the reporting deadline does not coincide with your submission of the DMR, it should be submitted separately to the Department by the reporting deadline set forth in the permit. See instructions for more information.

Facility Name: DELCORA STP Month: _____ Year: _____

Municipality: City of Chester County: Delaware Permit No.: PA0027103

☐ **Violations of Permit Effluent Limitations***

Date	Parameter	Permit Limit	Units	Statistical Code	Result	Units	Cause of Violation	Corrective Action Taken

☐ **Sanitary Sewer Overflows and Other Unauthorized Discharges***

Event Date	Substance Discharged	Location	Volume (gals)	Duration (hrs)	Receiving Waters	Impact on Waters	Cause of Discharge	Date DEP Notified

☐ **Other Permit Violations***

☐ Sample collection less frequent than required Explain _____

☐ Sample type not in compliance with permit Explain _____

☐ Violation of permit schedule Explain _____

☐ Other Explain _____

☐ Other Explain _____

*** If the space provided is not sufficient to record all information, please attach additional sheets.**

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

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INSTRUCTIONS FOR COMPLETING CSO MONTHLY INSPECTION SUPPLEMENTAL REPORT

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. List all CSO outfalls associated with the facility, as listed in the NPDES permit, in the column labeled "CSO Outfall No.," using additional sheets as needed.

3. Specify the location of the CSO (e.g., street or other identification information) in the column labeled "Outfall Location."

4. In the column labeled "Discharge?" enter "Yes" or "No" for each outfall to report whether a discharge was identified at any time during the calendar month. **If you respond Yes for any outfall, a separate "Detailed Outfall Report" must be submitted for that outfall.**

5. Add any additional outfall-specific information as needed in the "Comments" column.

6. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0441 7/2009

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CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103
Renewal application due **180 days** prior to expiration
This permit will expire on _____

CSO Outfall No.	Outfall Location*	Discharge?*	Comments

*See instructions for explanation.

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

INSTRUCTIONS FOR COMPLETING CSO DETAILED OUTFALL SUPPLEMENTAL REPORT

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., CSO Outfall No., and Permit Expiration Date.

2. Explain how the discharge was identified (e.g., inspection, complaint, alarm) in the column labeled "Identification."

3. In the column labeled "Discharge Volume," specify the volume of the discharge in million gallons, and (in parentheses) identify the method used to determine the volume by selecting one of the following codes:

   O = Observed duration and rate of flow to approximate overflow volume.
   C = Calculated overflow volume utilizing a model or empirical analysis.
   M = Measured overflow volume from data collected by a calibrated flow monitor.
   U = Unable to determine.

4. In the column labeled "Duration (hrs)," specify the total discharge period. If you estimate the discharge period, explain how you arrived at the estimate in the Comments column.

5. In the column labeled "Cause," identify the cause of the overflow (e.g., line or gate blockage, malfunction, hydraulic load).

6. In the column labeled "Precipitation," report the total precipitation for the day, in inches (in), as measured using an on-site rain gauge, or use local airport data.

7. Add any additional outfall-specific information as needed in the "Comments" column.

8. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0442 7/2009

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BUREAU OF WATER STANDARDS AND FACILITY REGULATION

CSO SUPPLEMENTAL REPORT
DETAILED OUTFALL REPORT

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103 Outfall No. _____
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	Identification*	Discharge Volume (MG)*	Duration (hrs)	Cause*	Precipitation (in)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for Knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

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BUREAU OF WATER STANDARDS AND FACILITY REGULATION

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INSTRUCTIONS FOR COMPLETING HAULED IN RESIDUAL WASTES SUPPLEMENTAL REPORT

Use this form to document receipt of residual wastes at your treatment facility (e.g., food processing waste, landfill leachate, oil and gas wastewaters). Municipal wastes such as sewage sludge and septage should be documented on the Hauled in Municipal Wastes Supplemental Report (3800-FM-WSFR0437).

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. Enter the date for each day in which the facility receives residual wastes. If wastewater is received from more than one generator on the same day, repeat the date in a separate row.

3. Report the total volume received each day from each generator (source), in whole gallons.

4. Report the license plate number of the vehicle hauling the wastewater to the treatment facility. If more than one vehicle is used by a generator, report the date and total volume hauled by each vehicle daily (use separate rows as necessary).

5. For oil and gas wastewaters, enter the permit number of the well from which the wastewater was generated. For other wastewaters, this column may remain blank.

6. Report the source of each load of residual waste, including the generator name, address, and state. For oil and gas wastewaters, report the location of the well(s) generating the wastewater.

7. Enter Wastewater Type, typically frac water, drilling fluids or production water for oil and gas wastewaters, or other types such as food processing waste or leachate.

8. If the wastewater has been analyzed and reported on a Residual Waste Form 26R, or a separate waste characterization using the parameters from Form 26R, enter "Yes" under the column "Chemical Analysis", otherwise enter "No".

9. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0450 1/2010

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SUPPLEMENTAL REPORT
HAULED IN RESIDUAL WASTES

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: ______ Year: ______
NPDES Permit No.: PA0027103
Renewal application due **180 days** prior to expiration
This permit will expire on ______

Date	Volume Received *(gallons)*	License Plate No.	Well Permit No.	Source of Residual Waste			Wastewater Type	Chemical Analysis *(Yes/No)*
				Generator	*Address*	*State*		
Total:								

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: ______ Signature: ______
Title: ______ Date: ______

3800-FM-WSFR0189 3/2009

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SUPPLEMENTAL LABORATORY ACCREDITATION FORM[1]

Permittee Name: DELCORA

Address: 100 East Fifth Street
Chester, PA 19016-0999

PERMIT NUMBER	MONITORING PERIOD Year/Month/Day						
PA0027103				TO			

PARAMETER	ANALYSIS METHOD	LAB NAME	LAB ID NUMBER[2]

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibly of fine and imprisonment for knowing violations.

Name/Title Principal Executive Officer _____

Phone: _____

Signature of Principal Executive Officer or Authorized Agent _____

Date: _____

[1] Submit this form with the first Discharge Monitoring Report (DMR), Annual Report or Recordkeeping and Reporting Form, where sample results are submitted to the Department for compliance purposes. You do not need to send this form to the Department again UNLESS there has been a change to the lab or method of analysis.

[2] For parameter(s) covered under accreditation-by-rule, submit the lab's registration number in lieu of an accreditation number.

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BUREAU OF WATER STANDARDS AND FACILITY REGULATION

ANNUAL INSPECTION FORM FOR NPDES PERMITS FOR DISCHARGES OF STORMWATER ASSOCIATED WITH INDUSTRIAL ACTIVITIES

Who May Use This Form

This form is to be used by all PAG-03 permit holders to comply with the (1) annual inspection requirement in Section A.2.b.(1) concerning Appendix J facilities, and (2) Comprehensive Site Compliance Evaluation and Record Keeping requirement in Section C.3.c. of the General Permit. This form may also be used for facilities with individual NPDES permits.

Completing the Form

One form must be completed for each facility or site. Please address all applicable questions and provide documentation to support the responses.

Permittees required to comply with Appendix J of the General Permit are eligible to conduct an Annual Inspection in lieu of monitoring. The Annual Inspection shall include visual inspection of all outfalls and a Comprehensive Site Compliance Evaluation. Complete items 10 through 15 for each outfall inspected. Where possible, visual inspection shall identify substances present in the sediment. The Annual Inspection/Certification must identify area(s) contributing pollutant(s) to stormwater discharge(s) and evaluate whether measures to reduce pollutant loadings identified in the PPC Plan are adequate and properly implemented in accordance with terms of the General Permit or whether additional control measures are necessary. Any deficiencies found during the inspection are to be corrected promptly in accordance with Part C.3.c.(2) of the General Permit.

Permittees that need to comply with requirements other than Appendix J of the General Permit must use this form to comply with Comprehensive Site Evaluation and Recordkeeping requirement of the General Permit.

Where to File This Form

When an annual inspection is conducted in lieu of monitoring, the permittee shall submit a completed and signed Annual Inspection Form, postmarked no later than 28 days after completion of the inspection to the appropriate DEP regional office. All other permittees shall retain the completed and signed form as part of the PPC Plan.

3800-PM-WSFR0083v Rev. 11/2010
Annual Inspection

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ANNUAL INSPECTION FORM FOR NPDES PERMITS FOR DISCHARGES OF STORMWATER ASSOCIATED WITH INDUSTRIAL ACTIVITIES

1. Date of Inspection _____

3. NPDES Permit # PA0027103

2. Facility Owner/Operator Name and Address:
DELCORA
100 E 5th Street, PO Box 999
Chester, PA 19013-4508
Tel: (610) 876-5523 Fax: _____

4. Facility Address and Location
Street 3201 W Front Street, Chester, PA 19013-2320
Municipality City of Chester County Delaware

VISUAL INSPECTION

Provide the following information for the storm event

5. Duration _____

6. Estimation of rainfall (in inches) † _____

† The annual inspection should be conducted after a storm event that is greater than 0.1 inches in magnitude and that occurred at least 72 hours from the previous 0.1 inch storm event.

7. Estimate the time between the previous rain event _____

8. Estimate the total volume (in gallons) for each outfall and report it in item 9.
Volume = C x I A,
where C is the runoff coefficient (i.e, 0.9 for paved and 0.5 for unpaved)
I is the rainfall amount (in ft), and
A is the area (square feet) drained to the outfall inspected
(convert from cubic feet to gallons by multiplying by 7.481).

9. Estimate the size of the drainage area (in square feet) for each outfall.

Outfall #	Drainage Area	% Paved	% Unpaved	Volume in gallons

Complete the following information for each outfall inspected (items 10 through 15)

VISUAL INSPECTION OF OUTFALL NUMBER

10. Description of area(s) that drains to outfall. _____

11. Description of stormwater management practices, erosion and sedimentation control practices, and other structural control measures that are in place to control pollutants from running off-site.

12. Is there visible flow from the pipe? ☐ Yes ☐ No (Go to number 14) Pipe Dia. (inches) _____
    a. ODOR: Chemical Musty Sewage Rotten Eggs Other _____
    b. COLOR: Clear Red Yellow Brown Other _____
    c. CLARITY: Clear Cloudy Opaque Suspended Solids Other _____
    d. FLOATABLES: Suds Oily Film Garbage Sewage Other _____
    e. DEPOSITS/STAINS: None Oily Sediment Other _____
    f. VEGETATION: None Normal Excessive Inhibited Other _____

13. Is there standing water present? ☐ Yes ☐ No (Go to number 16)
    a. ODOR: Chemical Musty Sewage Rotten Eggs Other _____
    b. COLOR: Clear Red Yellow Brown Other _____
    c. CLARITY: Clear Cloudy Opaque Suspended Solids Other _____
    d. FLOATABLES: Suds Oily Film Garbage Sewage Other _____
    e. DEPOSITS/STAINS: None Oily Sediment Other _____
    f. VEGETATION: None Normal Excessive Inhibited Other _____

14. Is there any evidence of or potential for any pollutant being discharged at this outfall? ☐ Yes ☐ No
    Describe: _____

    If yes, identify substances present in the sediment (if possible). _____

15. Description of corrective measures taken or planned to remove sediments or debris if found during inspection. Please provide a schedule if actions are planned.

COMPREHENSIVE SITE COMPLIANCE EVALUATION

16. Do drainage maps reflect current conditions? ☐ Yes ☐ No

If no, provide your comments.
Comments: _____

17. Based on review of PPC Plan (including Housekeeping Measures), are any changes, corrections or updates necessary? ☐ Yes ☐ No

If yes, provide your comments.
Comments: _____

18. Have you inspected all structural stormwater controls used to implement the PPC Plan to determine if they are adequate? ☐ Yes ☐ No

If no, provide your comments.
Comments: _____

19. Have you inspected the entire site to determine if erosion and sedimentation control measures are adequate? ☐ Yes ☐ No

If no, provide your comments.
Comments: _____

20. Summarize corrective actions/measures completed or planned to correct any deficiencies found as a result of the inspection. Please provide a schedule if actions are planned.

_____

21. Signature of Inspector

Name of Inspector: _____

Date Report Prepared: _____

Signature of Inspector: _____

22. Signature of Owner/Operator of Facility

_____ _____ _____

Name/Title Principal Executive Officer Signature Date

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 Pa. C.S. §4904 (relating to unsworn falsification).

3800-PM-WSFR0083t Rev. 11/2010
Additional Information

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BUREAU OF WATER STANDARDS AND FACILITY REGULATION

ADDITIONAL INFORMATION
FOR THE REPORTING OF STORM WATER DISCHARGE MONITORING

(This form must be completed and submitted with the DMR form for <u>each</u> outfall sampled)

A. PERMITTEE'S NAME	OUTFALL/DISCHARGE NO.
DELCORA	

FACILITY/LOCATION

DELCORA STP, Chester City, Delaware County

B. SAMPLED STORM EVENT

Provide the date of storm event:	Provide the duration (in hours) of storm event:
Estimate rainfall measurements (in inches) of the storm which generated the sample runoff:	Estimate the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch) storm event:

Drainage area and volume of runoff:

(1) Paved area _____ square feet x 0.9 (estimated runoff coefficient) x rainfall _____ inches x 0.6234 = _____ gallons
(2) Unpaved area _____ square feet x 0.5 (estimated runoff coefficient) x rainfall _____ inches x 0.6234 = _____ gallons

Total area _____ square feet Total volume of discharge _____ gallons

C. GRAB SAMPLE METHODOLOGY

If a grab sample during the first 30 minutes of the discharge was impracticable, and the sample was instead taken during the first hour of the discharge, describe the circumstances:

D. SAMPLE WAIVER

If samples could not be collected due to adverse climactic conditions, describe why samples could not be collected. Attach available documentation of the event.

If monitoring data submitted is being used to represent other substantially identical outfalls, summarize on a separate sheet the drainage area and volume of runoff under item B. above for each outfall.

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OVERFLOW REPORT FORM

Permittee Name: DELCORA
Permit No.: PA0027103

Month/Year: _____

Overflow Date	Beginning Time	End Time	Volume (MG)	Comments

_____ _____

Name and Title of Principal Executive Officer **Signature**

Re 30 (WP)

Delaware Valley Early Warning System

Updated December 2012

EWS Hotline at 1-866-844-0850

OVERVIEW

The Delaware Valley Early Warning System (EWS) is an integrated monitoring, notification, and communication system designed to provide advance warning of surface water contamination events in the Schuylkill and lower Delaware River watersheds. The Philadelphia Water Department (PWD) began development of the EWS in 2002 with funding provided by the Pennsylvania Department of Environmental Protection (PADEP) and the United States Environmental Protection Agency (USEPA). The EWS was deployed as a fully functional system in 2004. The system covers the entire Schuylkill River watershed as well as the lower Delaware River Basin from Wilmington, DE, to the Delaware Water Gap, near Dingman's Ferry, PA.

KEY COMPONENTS

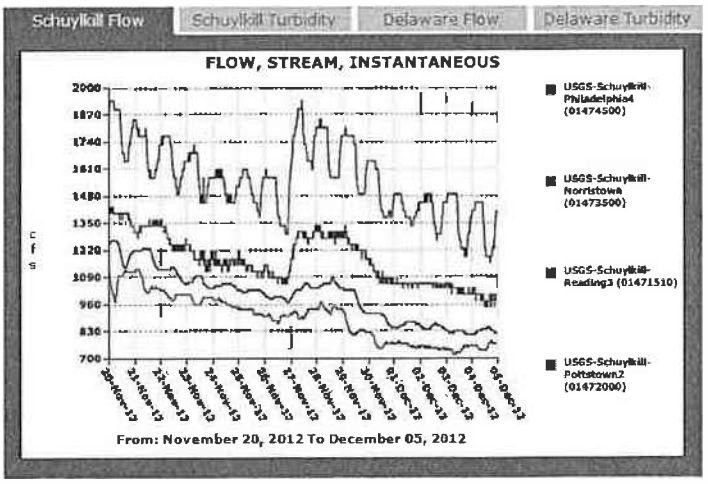
□ ***Partnership***: The EWS Partnership brings together key stakeholders and includes representatives from both public and private drinking water supply and treatment facilities in the coverage area, industries who withdraw water from the Schuylkill and Delaware Rivers for daily operations, and representatives of government agencies.

□ ***Notification System***: The notification system is the means by which water suppliers and industries are made aware of a contamination event. This system, which was developed to support existing notification protocols, relies upon an emergency responder, water supplier, discharger, or other like party to initiate an alert. Events are reported to the EWS members using either the automated telephone notification system or web-based notification system.

Report a New Water Quality Event

□ ***Monitoring Network***: The EWS monitoring network includes on-line water quality and flow monitoring stations, drawing on USGS sites and monitors at water treatment plant intakes throughout both watersheds.

Real-Time Flow and Turbidity Charts for the last 15 days



□ ***Website and Database Portal***: The website and database portal constitute the backbone of the EWS. The website is fully integrated with the notification system and monitoring network, and includes a Spill Model Analysis Tool that allows users to simulate and track spills for spill response planning purposes.

The EWS notification and event recording features provide valuable decision support information to PWD and system subscribers. Ongoing upgrades and enhancements continue to be made to ensure that the Delaware Valley EWS continues to serve as the most advanced system possible, helping to protect the drinking water supplies for over 3 million people in the Schuylkill and lower Delaware River watersheds.

For more information on the EWS, please contact:

Kelly Anderson
Source Water Protection Program Manager
Philadelphia Water Department
(215) 685.6245
Kelly.Anderson@phila.gov

Alison Aminto
EWS Project Engineer
Philadelphia Water Department
(215) 685.6315
Alison.Aminto@phila.gov

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Guidance for Reporting Fecal Coliform Based on the 10% Rule in the Permit

FECAL COLIFORM 10% RULE DETERMINATION

1. Determine the number of samples that constitute 10% of the Fecal Coliform sampling analysis performed during the reporting period.

   Examples:

   30 samples collected, 10% = 3
   23 samples collected, 10% = 2
   10 samples collected, 10% = 1
   less than 10 samples collected, 10% = 0

2. Determine the number of sample results that exceeded 1,000 during the reporting period. If the number of sample results exceeding 1,000 is greater than the number determined for the 10% rule, a violation has occurred.

REPORTING VALUE FOR THE FECAL COLIFORM 10% RULE

1. When all sample results during the reporting period are 1,000 or less, report the highest result as the "maximum" on the DMR.

2. When 10% or less of the sample results during the reporting period exceed 1,000, report the highest sample result not exceeding 1,000.

3. When greater than 10% of the sample results during the reporting period exceed 1,000, report the highest sample result.

DETERMINING THE NUMBER OF EXCEEDANCES FOR FECAL COLIFORM

1. To determine the number of exceedances for the reporting period, count the total number of samples exceeding the 10% rule and add one if the geometric mean exceeds 200.

   Example 1:

   The following Fecal Coliform results have been reported:

   100; 15; 51; 1,000; 520; **1,200; 3,500; 6,871; 1,540;** 1,000; 1,000; 850; **1,580;** 59; 26; 47; **1,980;** 15; 58; 24; 19; 175; 99; 149; 152; 142; 157; 100; 158; and 157

A total of 30 sample results, 10% = 3; 6 results exceed 1,000 **(bolded);** therefore, a violation of the 10% rule has occurred; the highest result is 6,871; this result will be reported on the DMR as the "instantaneous maximum" for the 10% rule; the geometric mean is 207; this will be reported on the DMR as the "geometric mean."

The number exceedances for the reporting period is 4; 3 values exceed the 10% rule (6 greater than 1,000 – 3 (10% of the results exceeding 1,000) = 3) plus the exceedance of the geometric mean. Therefore, 4 exceedances will be reported on the DMR for Fecal Coliform.

Example 2:

The following Fecal Coliform results have been reported:

100; 15; 51; 1,000; 520; **1,200; 3,500;** 68; 54; 1,000; 1,000; 850; 15; 59; 26; 47; **1,980;** 15; 58; 24; 19; 175; 99; 149; 152; 142; 157; 100; 158; and 157

A total of 30 sample results, 10% =3; 3 results exceed 1,000 **(bolded);** therefore, you are in compliance with the 10% rule and no violation of the 10% rules has occurred; the highest result (not including those that fall in the 10%) is 1,000; this result will be reported on the DMR as the "instantaneous maximum" for the 10% rule; the geometric mean is 136; this will be reported on the DMR as the "geometric mean."

The number of exceedances for the reporting period is 0.

Example 3:

The following Fecal Coliform results have been reported:

100; **1,109;** 120; and 98

A total of 4 sample results, 10% = 0; 1 result exceeds 1,000 **(bolded),** therefore, in violation of the 10% rule has occurred; the highest result is 1,109; this result will be reported on the DMR as the "instantaneous maximum" for the 10% rule; the geometric mean is 136; this will be reported on the DMR as the "geometric mean."

The number of exceedances for the reporting period is 1.

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Southeast Regional Office

December 17, 2013

CERTIFIED MAIL NO. 7007 3020 0002 8265 3199

Mr. Joseph L. Salvucci
Executive Director
DELCORA
100 East Fifth Street, P.O Box 999
Chester, PA 19016-0999

Re: Final NPDES Permit - Sewage
DELCORA STP
NPDES Permit No. PA0027103 A-1
Authorization ID No. 1000881
Chester City, Delaware County

Dear Mr. Salvucci:

Your NPDES permit amendment is enclosed. Please read the permit carefully. The permit expires on the date identified on page 1 of the permit. A renewal application must be submitted to this office 180 days prior to the permit expiration date, if a discharge is expected to continue past the expiration date of the permit.

Enclosed are Discharge Monitoring Report (DMR) templates and DMR instructions. It is recommended that you retain the DMR templates in the event you are unable to submit DMRs electronically through DEP's eDMR system. Routine use of the eDMR system is a requirement of the permit unless the conditions in Part A III.B of the permit are met to withdraw from the eDMR system.

Also enclosed is a Supplemental Form Inventory, which identifies the forms that are attached to the permit and must be submitted as attachments to eDMR reports, as applicable (see individual form instructions). The submission of other supplemental forms may be required in accordance with the permit. We encourage you to use the spreadsheet versions of supplemental forms that contain appropriate validation and DEP-approved calculations.

We would like to bring to your attention to the enclosed information about the Early Warning System (EWS). The EWS may be useful to initiate an alert by reporting an event to downstream water suppliers and industries. We encourage you to use this notification procedure when needed.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717.787.3483. TDD

users may contact the Board through the Pennsylvania Relay Service, 800.654.5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717.787.3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717.787.3483) FOR MORE INFORMATION.

If you have any questions, please contact Sara Abraham at 484.250.5195.

Sincerely,

Jenifer L. Fields, P.E.
Environmental Program Manager
Clean Water Program

Enclosures

cc: City of Chester (w/o enclosure)
Chester Environmental Partnership (w/o enclosure)
U. S. Environmental Protection Agency
Mr. Kovach-DRBC
Operations Section
Mr. O'Neil-Majors File
Ms. Lashley (w/o enclosure)
Central Office, Division of Operations, Monitoring and Data Systems
Re

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE REQUIREMENTS FOR PUBLICLY OWNED TREATMENT WORKS (POTWs)

NPDES PERMIT NO: PA0027103
Amendment No. 1

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 *et seq.* ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 *et seq.*,

Delaware County Regional Water Quality Control Authority (DELCORA)
100 East Fifth Street, P O Box 999
Chester, PA 19016-0999

is authorized to discharge from a facility known as **DELCORA STP**, located at **3201 West Front Street, City of Chester, Delaware County**, to the **Delaware River Estuary Zone 4** in Watershed(s) **3-G** in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts A, B and C hereof.

THIS PERMIT SHALL BECOME EFFECTIVE ON January 1, 2014

THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON April 30, 2018

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.

2. Failure to comply with the terms, conditions or effluent limitations of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (40 CFR 122.41(a))

3. A complete application for renewal of this permit, or notice of intent to cease discharging by the expiration date, must be submitted to DEP at least 180 days prior to the above expiration date (unless permission has been granted by DEP for submission at a later date), using the appropriate NPDES permit application form. (40 CFR 122.41(b), 122.21(d))

   In the event that a timely and complete application for renewal has been submitted and DEP is unable, through no fault of the permittee, to reissue the permit before the above expiration date, the terms and conditions of this permit, including submission of the Discharge Monitoring Reports (DMRs), will be automatically continued and will remain fully effective and enforceable against the discharger until DEP takes final action on the pending permit application. (25 Pa. Code 92a.7(b), (c))

4. This NPDES permit does not constitute authorization to construct or make modifications to wastewater treatment facilities necessary to meet the terms and conditions of this permit.

DATE PERMIT ISSUED April 2, 2013

ISSUED BY

Jenifer L. Fields, P.E.
Clean Water Program Manager
Southeast Regional Office

DATE PERMIT AMENDMENT ISSUED December 17, 2013

Permit No. PA0027103 A-1

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. A. For Outfall 001 , **Latitude** 39° 49' 25.00" , **Longitude** 75° 23' 22.00" , **River Mile Index** 80.71 , **Stream Code** 0002

Discharging to Delaware River Estuary Zone 4

which receives wastewater from DELCORA STP

1. The permittee is authorized to discharge during the period from Permit Effective Date through Completion of plant expansion.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements, Footnotes and Supplemental Information).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.5	XXX	1.0	1/day	Grab
CBOD5	7,000	10,500	XXX	19	29 Wkly Avg	38	1/day	24-Hr Composite
CBOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/day	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
CBOD20	10,500	XXX	XXX	XXX	XXX	XXX	1/week	24-Hr Composite
CBOD20 (%) Percent Removal	XXX	XXX	XXX	89.25 Min % Removal	XXX	XXX	1/week	24-Hr Composite
Total Suspended Solids	11,000	16,500	XXX	30	45 Wkly Avg	60	1/day	24-Hr Composite
Total Suspended Solids Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/day	24-Hr Composite
Total Dissolved Solids	XXX	XXX	XXX	Report	Report	Report	2/month	24-Hr Composite
Oil and Grease	5,500	XXX	XXX	15	XXX	30	1/day	Grab

Outfall 001, Continued (from Permit Effective Date through Completion of plant expansion)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	1/day	Grab
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000*	1/day	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Nitrate as N	XXX	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Nitrite as N	XXX	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Total Kjeldahl Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Total Cadmium	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Copper	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Cyanide	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Lead	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Zinc	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite

Outfall 001 , Continued (from Permit Effective Date through Completion of plant expansion)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) [1]		Concentrations (mg/L)				Minimum [2] Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Chlorodibromomethane	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
Dichlorobromomethane	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
PCBs (Dry Weather) (pg/L)** Jan 1 - Jun 30	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PCBs (Dry Weather) (pg/L)** Jul 1 - Dec 31	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PCBs (Wet Weather) (pg/L)** Jan 1 - Jun 30	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PCBs (Wet Weather) (pg/L)** Jul 1 - Dec 31	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 001. *See Other Requirement No. R. **See Other Requirement No. S .

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. B. For Outfall 001 , **Latitude** 39° 49' 21.00" , **Longitude** 75° 23' 18.00" , **River Mile Index** 80.71 , **Stream Code** 0002

Discharging to Delaware River Estuary Zone 4

which receives wastewater from DELCORA STP

1. The permittee is authorized to discharge during the period from Completion of plant expansion*** through Permit Expiration Date.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements, Footnotes and Supplemental Information).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.5	XXX	1.0	1/day	Grab
CBOD5	7,000	10,500	XXX	17	25 Wkly Avg	34	1/day	24-Hr Composite
CBOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/day	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
CBOD20	10,500	XXX	XXX	XXX	XXX	XXX	1/week	24-Hr Composite
CBOD20 (%) Percent Removal	XXX	XXX	XXX	89.25 Min % Removal	XXX	XXX	1/week	24-Hr Composite
Total Suspended Solids	12,500	18,760	XXX	30	45 Wkly Avg	60	1/day	24-Hr Composite
Total Suspended Solids Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/day	24-Hr Composite
Total Dissolved Solids	XXX	XXX	XXX	1,000	2,000	2500	2/month	24-Hr Composite
Oil and Grease	6,250	XXX	XXX	15	XXX	30	1/day	Grab

Outfall 001, Continued (from Completion of plant expansion through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) [1]		Concentrations (mg/L)				Minimum [2] Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	1/day	Grab
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000*	1/day	Grab
Ammonia-Nitrogen May 1 - Oct 31	9,590	XXX	XXX	23	XXX	46	2/month	24-Hr Composite
Ammonia-Nitrogen Nov 1 - Apr 30	28,770	XXX	XXX	69	XXX	138	2/month	24-Hr Composite
Nitrate as N	XXX	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Nitrite as N	XXX	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Total Kjeldahl Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Total Cadmium	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Copper	XXX	XXX	XXX	0.027	0.053	0.066	1/month	24-Hr Composite
Total Cyanide	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Lead	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite

Outfall 001, Continued (from Completion of plant expansion through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) [1]		Concentrations (mg/L)				Minimum [2] Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Zinc	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Chlorodibromomethane	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
Dichlorobromomethane	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
PCBs (Dry Weather) (pg/L)** Jan 1 - Jun 30	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PCBs (Dry Weather) (pg/L)** Jul 1 - Dec 31	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PCBs (Wet Weather) (pg/L)** Jan 1 - Jun 30	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PCBs (Wet Weather) (pg/L)** Jul 1 - Dec 31	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 001. *See Other Requirement No. R. ** See Other Requirement No. S. *** See the Other Requirement No. O.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. C. For Outfall 028 , **Latitude** 39° 49' 30.00" , **Longitude** 75° 23' 45.00" , **River Mile Index** 80.71 , **Stream Code** 0002

Discharging to Delaware River Estuary Zone 4

which receives wastewater from the area around the primary treatment units and the parking area around the administrative buildings (B-2 and B-5) at DELCORA STP

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements, Footnotes and Supplemental Information).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) [1]		Concentrations (mg/L)				Minimum [2] Measurement Frequency	Required Sample Type
	Average Monthly		Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
CBOD5	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Chemical Oxygen Demand	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Kjeldahl Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 028 (inlet near the maintenance building). Also See Part C Condition No. IV

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. D. For Outfall 029 , **Latitude** 39° 49' 30.00" , **Longitude** 75° 23' 30.00" , **River Mile Index** 80.71 , **Stream Code** 0002

Discharging to Delaware River Estuary Zone 4

which receives stormwater from the areas of the primary treatment units, sludge storage and processing, truck unloading, and waste storage areas at DELCORA STP

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 029 not monitored. Also See Part C Condition No.IV for annual inspection and additional requirements.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. E. For Outfall 030 , **Latitude** 39° 49' 30.00" , **Longitude** 75° 23' 45.00" , **River Mile Index** 80.71 , **Stream Code** 0002

Discharging to Delaware River Estuary Zone 4

which receives stormwater from the areas around the secondary treatment units at DELCORA STP

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 030 not monitored. Also See Part C Condition No.IV for annual inspection and additional requirements.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. F. For Outfall 031 , **Latitude** 39° 49' 30.00" , **Longitude** 75° 23' 30.00" , **River Mile Index** 80.71 , **Stream Code** 0002

Discharging to Delaware River Estuary Zone 4

which receives stormwater from the areas of the secondary treatment units and former ash lagoon at DELCORA STP

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 031 not monitored. Also See Part C Condition No.IV for annual inspection and additional requirements.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

Outfalls	Interceptor/Regulator Locations	Latitudes	Longitudes	Name of Receiving Streams
002	Front and Booth	39°49'30"	-75°23'31"	Delaware River
003	Front and Highland	39°49'34"	-75°23'11"	Delaware River
004	Front and Hayes	39°50'36"	-75°23'07"	Delaware River
005	Front and Townsend	39°49'46"	-75°22'53"	Delaware River
007	Delaware and Reaney	39°49'51"	-75°22'45"	Delaware River
008	2nd and Tilghman	39°50'05"	-75°22'22"	Delaware River
009	2nd and Lloyd	39°50'14"	-75°22'10"	Delaware River
010	5th and Pusey	39°50'26"	-75°22'19"	Delaware River
011	2nd and Parker	39°50'26"	-75°21'54"	Delaware River
013	2nd and Welsh	39°50'37"	-75°21'17"	Delaware River
014	3rd and Upland	39°50'50"	-75°21'05"	Delaware River
032	2nd and Avenue of The States	39°50'34"	-75°21'25"	Delaware River
012	2nd and Edgmont	39°50'42"	-75°21'38"	Chester Creek
019	14th and Crozer Hospital	39°51'24"	75°21'54"	Chester Creek
020	Kerlin and Finland	39°51'24"	-75°22'27"	Chester Creek
021	9th and Sproul	39°51'08"	-75°21'49"	Chester Creek
022	6th and Sproul	39°50'56"	-75°21'47"	Chester Creek
023	3rd and Edgmont	39°50'45"	-75°21'42"	Chester Creek
024	3rd and Dock	39°50'44"	-75°21'43"	Chester Creek
025	5th and Penn	39°50'49"	-75°21'50"	Chester Creek
026	7th and Penn	39°50'58"	-75°21'55"	Chester Creek
015	4th and Melrose	39°51'03"	-75°20'48"	Ridley Creek
016	8th and McDowell	39°51'15"	-75°20'53"	Ridley Creek
017	9th and Campbell	39°51'16"	-75°20'51"	Ridley Creek
018	Sun Drive and Hancock Street	39°51'47"	-75°20'57"	Ridley Creek
033	Elkington Boulevard and Ridley Creek	39°52'22"	-75°22'29"	Ridley Creek

which receives wastewater from combined sewer overflow system

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements, Footnotes and Supplemental Information).

These CSO outfalls are subject to terms and conditions as specified in Part C. Condition No.V. There shall be no discharge during dry weather.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS (Continued)

Additional Requirements

1. The permittee may not discharge:

   a. Floating solids, scum, sheen or substances that result in observed deposits in the receiving water. (25 Pa Code 92a.41(c))

   b. Oil and grease in amounts that cause a film or sheen upon or discoloration of the waters of this Commonwealth or adjoining shoreline, or that exceed 15 mg/l as a daily average or 30 mg/l at any time (or lesser amounts if specified in this permit). (25 Pa. Code 92a.47(a)(7) and 95.2(2))

   c. Substances in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life. (25 Pa Code 93.6(a))

   d. Foam or substances that produce an observed change in the color, taste, odor or turbidity of the receiving water, unless those conditions are otherwise controlled through effluent limitations or other requirements in this permit. (25 Pa Code 92a.41(c))

2. The monthly average percent removal of BOD_5 or $CBOD_5$ and TSS must be at least 85% for POTW facilities on a concentration basis except where 25 Pa. Code 92a.47(g) and (h) are applicable to facilities with combined sewer overflows (CSOs) or as otherwise specified in this permit. (25 Pa. Code 92a.47(a)(3))

3. If the permit requires the reporting of average weekly statistical results, the maximum weekly average concentration and maximum weekly average mass loading shall be reported, regardless of whether the results are obtained for the same or different weeks.

4. The permittee shall monitor the sewage effluent discharge(s) for the effluent parameters identified in the Part A limitations table(s) during all bypass events at the facility, using the sample types that are specified in the limitations table(s). Where the required sample type is "composite", the permittee must commence sample collection within one hour of the start of the bypass, wherever possible. The results shall be reported on the Daily Effluent Monitoring supplemental form (3800-FM-BPNPSM0435) and be incorporated into the calculations used to report self-monitoring data on Discharge Monitoring Reports (DMRs).

Footnotes

(1) When sampling to determine compliance with mass effluent limitations, the discharge flow at the time of sampling must be measured and recorded.

(2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events.

Supplemental Information

(1) If the permit requires reporting of average weekly limitations use the following guideline. If the "maximum average concentration" and the "maximum average mass loading" does not occur within the same week, both the highest weekly average concentration and the highest weekly average mass load should be reported, regardless of whether they both occur during the same calendar week.

(2) The hydraulic design capacity of 50 million gallons per day for the treatment facility is used to prepare the annual Municipal Wasteload Management Report to help determine whether a "hydraulic overload" situation exists, as defined in Title 25 Pa. Code Chapter 94.

(3) The effluent limitations for Outfall 001 were determined using an effluent discharge rate of 44 million gallons per day before the completion of plant expansion.

(4) The effluent limitations for Outfall 001 were determined using an effluent discharge rate of 50 million gallons per day after the completion of plant expansion.

II. DEFINITIONS

At Outfall (XXX) means a sampling location in outfall line XXX below the last point at which wastes are added to outfall line (XXX), or where otherwise specified.

Average refers to the use of an arithmetic mean, unless otherwise specified in this permit. (40 CFR 122.41(l)(4)(iii))

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollution to surface waters of the Commonwealth. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (25 Pa. Code 92a.2)

Bypass means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i))

Calendar Week is defined as the seven consecutive days from Sunday through Saturday, unless the permittee has been given permission by DEP to provide weekly data as Monday through Friday based on showing excellent performance of the facility and a history of compliance. In cases when the week falls in two separate months, the month with the most days in that week shall be the month for reporting.

Clean Water Act means the Federal Water Pollution Control Act, as amended (33 U.S.C.A. §§1251 to 1387).

Composite Sample (for all except GC/MS volatile organic analysis) means a combination of individual samples (at least eight for a 24-hour period or four for an 8-hour period) of at least 100 milliliters (mL) each obtained at spaced time intervals during the compositing period. The composite must be flow-proportional; either the volume of each individual sample is proportional to discharge flow rates, or the sampling interval is proportional to the flow rates over the time period used to produce the composite. (EPA Form 2C)

Composite Sample (for GC/MS volatile organic analysis) consists of at least four aliquots or grab samples collected during the sampling event (not necessarily flow proportioned). The samples must be combined in the laboratory immediately before analysis and then one analysis is performed. (EPA Form 2C)

Daily Average Temperature means the average of all temperature measurements made, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar day or during the operating day if flows are of a shorter duration.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day. (25 Pa. Code 92a.2, 40 CFR 122.2)

Daily Maximum Discharge Limitation means the highest allowable "daily discharge."

Discharge Monitoring Report (DMR) means the DEP or EPA supplied form(s) for the reporting of self-monitoring results by the permittee. (25 Pa. Code 92a.2 and 40 CFR 122.2)

Estimated Flow means any method of liquid volume measurement based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters and batch discharge volumes.

Geometric Mean means the average of a set of n sample results given by the n^{th} root of their product.

Grab Sample means an individual sample of at least 100 mL collected at a randomly selected time over a period not to exceed 15 minutes. (EPA Form 2C)

Hauled-In Wastes means any waste that is introduced into a treatment facility through any method other than a direct connection to the sewage collection system. The term includes wastes transported to and disposed of within the treatment facility or other entry points within the collection system.

Hazardous Substance means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act. (40 CFR 122.2)

Immersion Stabilization (i-s) means a calibrated device is immersed in the wastewater until the reading is stabilized.

Indirect Discharger means a non-domestic discharger introducing pollutants to a Publicly Owned Treatment Works (POTW) or other treatment works. (25 Pa. Code 92a.2 and 40 CFR 122.2)

Industrial User means a source of Indirect Discharge. (40 CFR 403.3)

Instantaneous Maximum Effluent Limitation means the highest allowable discharge of a concentration or mass of a substance at any one time as measured by a grab sample. (25 Pa. Code 92a.2)

Measured Flow means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

Monthly Average Discharge Limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. (25 Pa. Code 92a.2)

Municipality means a city, town, borough, county, township, school district, institution, authority or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes. (25 Pa. Code 92a.2)

Publicly Owned Treatment Works (POTW) means a treatment works as defined by §212 of the Clean Water Act, owned by a state or municipality. The term includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. The term also includes sewers, pipes or other conveyances if they convey wastewater to a POTW providing treatment. The term also means the municipality as defined in section 502(4) of the Clean Water Act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works. (25 Pa Code 92a.2 and 40 CFR 122.2)

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR 122.41(m)(1)(ii))

Stormwater means the runoff from precipitation, snow melt runoff, and surface runoff and drainage. (25 Pa. Code 92a.2)

Stormwater Associated With Industrial Activity means the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant, and as defined at 40 CFR §122.26(b)(14)(i) – (ix) and (xi) and 25 Pa. Code 92a.2.

Toxic Pollutant means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains may, on the basis of information available to DEP cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in these organisms or their offspring. (25 Pa. Code 92a.2)

Weekly Average Discharge Limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

III. SELF-MONITORING, REPORTING AND RECORDKEEPING

A. Representative Sampling

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity (40 CFR 122.41(j)(1)). Representative sampling includes the collection of samples, where possible, during periods of adverse weather, changes in treatment plant performance and changes in treatment plant loading. If possible, effluent samples must be collected where the effluent is well mixed near the center of the discharge conveyance and at the approximate mid-depth point, where the turbulence is at a maximum and the settlement of solids is minimized. (40 CFR 122.48 and 25 Pa. Code § 92a.61)

2. Records Retention (40 CFR 122.41(j)(2))

   Except for records of monitoring information required by this permit related to the permittee's sludge use and disposal activities which shall be retained for a period of at least 5 years, all records of monitoring activities and results (including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records), copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained by the permittee for 3 years from the date of the sample measurement, report or application, unless a longer retention period is required by the permit. The 3-year period shall be extended as requested by DEP or the EPA Regional Administrator.

3. Recording of Results (40 CFR 122.41(j)(3))

   For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

   a. The exact place, date and time of sampling or measurements.
   b. The person(s) who performed the sampling or measurements.
   c. The date(s) the analyses were performed.
   d. The person(s) who performed the analyses.
   e. The analytical techniques or methods used; and the associated detection level.
   f. The results of such analyses.

4. Test Procedures (40 CFR 122.41(j)(4))

   Facilities that test or analyze environmental samples used to demonstrate compliance with this permit shall be in compliance with laboratory accreditation requirements of Act 90 of 2002 (27 Pa. C.S. §§4101-4113) and 25 Pa. Code Chapter 252, relating to environmental laboratory accreditation. Unless otherwise specified in this permit, the test procedures for the analysis of pollutants shall be those approved under 40 CFR Part 136 (or in the case of sludge use or disposal, approved under 40 CFR Part 136, unless otherwise specified in 40 CFR Part 503 or Subpart J of 25 Pa. Code Chapter 271), or alternate test procedures approved pursuant to those parts, unless other test procedures have been specified in this permit.

5. Quality/Assurance/Control

   In an effort to assure accurate self-monitoring analyses results:

   a. The permittee, or its designated laboratory, shall participate in the periodic scheduled quality assurance inspections conducted by DEP and EPA. (40 CFR 122.41(e), 122.41(i)(3))

   b. The permittee, or its designated laboratory, shall develop and implement a program to assure the quality and accurateness of the analyses performed to satisfy the requirements of this permit, in accordance with 40 CFR Part 136. (40 CFR 122.41(j)(4))

B. Reporting of Monitoring Results

1. The permittee shall effectively monitor the operation and efficiency of all wastewater treatment and control facilities, and the quantity and quality of the discharge(s) as specified in this permit. (40 CFR 122.41(e), 122.44(i)(1))

2. Discharge Monitoring Reports (DMRs) must be completed in accordance with DEP's published DMR Instructions (3800-BPNPSM-0463). DMRs are based on calendar reporting periods. DMR(s) must be received by the agency(ies) specified in paragraph 3 below in accordance with the following schedule:

   - Monthly DMRs must be received within 28 days following the end of each calendar month.

   - Quarterly DMRs must be received within 28 days following the end of each calendar quarter, i.e., January 28, April 28, July 28, and October 28.

   - Semiannual DMRs must be received within 28 days following the end of each calendar semiannual period, i.e., January 28 and July 28.

   - Annual DMRs must be received by January 28, unless Part C of this permit requires otherwise.

3. The permittee shall complete all Supplemental Reporting forms (Supplemental DMRs) provided by DEP in this permit (or an approved equivalent), and submit the signed, completed forms as an attachment to the DMR(s). If the permittee elects to use DEP's electronic DMR (eDMR) system, one electronic submission may be made for DMRs and Supplemental DMRs. If paper forms are used, the completed forms shall be mailed to:

   Department of Environmental Protection
   Clean Water Program
   2 East Main Street
   Norristown, PA 19401

   NPDES Enforcement Branch (3WP42)
   Office of Permits & Enforcement
   Water Protection Division
   U.S. EPA - Region III
   1650 Arch Street
   Philadelphia, PA 19103-2029

4. If the permittee elects to begin using DEP's eDMR system to submit DMRs required by the permit, the permittee shall, to assure continuity of business operations, continue using the eDMR system to submit all DMRs and Supplemental Reports required by the permit, unless the following steps are completed to discontinue use of eDMR:

   a. The permittee shall submit written notification to the regional office that issued the permit that it intends to discontinue use of eDMR. The notification shall be signed by a principal executive officer or authorized agent of the permittee.

   b. The permittee shall continue using eDMR until the permittee receives written notification from DEP's Central Office that the facility has been removed from the eDMR system, and electronic report submissions are no longer expected.

5. The completed DMR Form shall be signed and certified by either of the following applicable persons, as defined in 25 Pa. Code 92a.22:

   - For a corporation - by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
   - For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.

- For a municipality, state, federal or other public agency - by a principal executive officer or ranking elected official.

If signed by a person other than the above, written notification of delegation of DMR signatory authority must be submitted to DEP in advance of or along with the relevant DMR form. (40 CFR 122.22(b))

6. If the permittee monitors any pollutant at monitoring points as designated by this permit, using analytical methods described in Part A III.A.4. herein, more frequently than the permit requires, the results of this monitoring shall be incorporated, as appropriate, into the calculations used to report self-monitoring data on the DMR. (40 CFR 122.41(l)(4)(ii))

C. Reporting and Notification Requirements

1. Planned Changes to Physical Facilities – The permittee shall give notice to DEP as soon as possible but no later than 30 days prior to planned physical alterations or additions to the permitted facility. A permit under 25 Pa. Code Chapter 91 may be required for these situations prior to implementing the planned changes. A permit application, or other written submission to DEP, can be used to satisfy the notification requirements of this section.

Notice is required when:

a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b). (40 CFR 122.41(l)(1)(i))

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in this permit. (40 CFR 122.41(l)(1)(ii))

c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR 122.41(l)(1)(iii))

d. The planned change may result in noncompliance with permit requirements. (40 CFR 122.41(l)(2))

e. The facility is proposing an expansion or modifications to its treatment processes.

2. Planned Changes to Waste Stream – Under the authority of 25 Pa. Code 92a.24(a) and 40 CFR 122.42(b), the permittee shall provide notice to DEP and EPA as soon as possible but no later than 45 days prior to any planned changes in the volume or pollutant concentration of its influent waste stream as a result of indirect discharges or hauled-in wastes, as specified in paragraphs 2.a. and 2.b., below. Notice shall be provided on the "Planned Changes to Waste Stream" Supplemental Report (3800-FM-BPNPSM0482), available on DEP's website. The permittee shall provide information on the quality and quantity of waste introduced into the POTW, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW (40 CFR 122.42(b)(3)). The Report shall be sent via Certified Mail or other means to confirm DEP's receipt of the notification. DEP will determine if the submission of an application and receipt of an amended permit is required.

a. Introduction of New Pollutants (25 Pa. Code 92a.24(a), 40 CFR 122.42(b)(1))

New pollutants are defined as parameters that meet one or more of the following criteria:

(i) Were not detected in the facility's influent waste stream as reported in the permit application; and were not otherwise analyzed in the influent and reported to DEP prior to permit issuance; and have not been previously approved to be included in the permittee's influent waste stream by DEP and/or EPA in writing; and would be detectable in the facility's influent waste stream using the most sensitive testing method, as a result of the addition of the planned change;

(ii) Are previously unapproved pollutants introduced into the POTW from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants (40 CFR 122.42(b)(1)).

The permittee shall provide notification of the introduction of new pollutants in accordance with paragraph 2 above. The permittee may not authorize the introduction of new pollutants until the permittee receives DEP's and/or EPA's written approval.

b. Increased Loading of Approved Pollutants (25 Pa. Code 92a.24(a), 40 CFR 122.42(b)(2))

Approved pollutants are defined as parameters that meet one or more of the following criteria:

(i) Were detected in the facility's influent waste stream as reported in the permittee's permit application; or were otherwise analyzed in the influent and reported to DEP prior to permit issuance; or have been previously approved to be included in the permittee's influent waste stream by DEP and/or EPA in writing;

(ii) Have an effluent limitation or monitoring requirement in this permit.

The permittee shall provide notification of the introduction of increased influent loading (lbs/day) of approved pollutants in accordance with paragraph 2 above when (1) the cumulative increase in influent loading (lbs/day) exceeds 20% of the maximum loading reported in the permit application, or a loading previously approved by DEP and/or EPA, or (2) may cause an exceedance in the effluent of Effluent Limitation Guidelines (ELGs) or limitations in Part A of this permit, or (3) may cause interference or pass through at the POTW, or (4) may cause exceedances of the applicable water quality standards in the receiving stream. Unless specified otherwise in this permit, if DEP and/or EPA does not respond to the notification within 30 days of its receipt, the permittee may proceed with the increase in loading. The acceptance of increased loading of approved pollutants may not result in an exceedance of ELGs or effluent limitations, may not result in a hydraulic or organic overload condition as defined in 25 Pa. Code 94.1, and may not cause exceedances of the applicable water quality standards in the receiving stream.

3. Reporting Requirements for Hauled-In Wastes

a. Receipt of Residual Waste

(i) The permittee shall document the receipt of all hauled-in residual wastes (including but not limited to wastewater from oil and gas wells, food processing waste, and landfill leachate) received for processing at the treatment facility. The permittee shall report hauled-in residual wastes on a monthly basis to DEP on the "Hauled In Residual Wastes" Supplemental Report (3800-FM-BPNPSM0450) as an attachment to the DMR. If no residual wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report. The information used to develop the Report shall be retained by the permittee for five years from the date of receipt and must be made available to DEP or EPA upon request.

(1) The dates that residual wastes were received.

(2) The volume (gallons) of wastes received.

(3) The license plate number of the vehicle transporting the waste to the treatment facility.

(4) The permit number(s) of the well(s) where residual wastes were generated, if applicable.

(5) The name and address of the generator of the residual wastes.

(6) The type of wastewater.

(7) Documentation of whether or not a chemical analysis of the residual wastes were reported on a Residual Waste Form 26R, or a separate waste characterization using the parameters from Form 26R.

The transporter of residual waste must maintain these and other records as part of the daily operational record (25 Pa. Code 299.219). If the transporter is unable to provide this information, the residual wastes shall not be accepted by the permittee until such time as the transporter is able to provide the required information.

(ii) The following conditions apply to the characterization of residual wastes received by the permitted treatment facility:

(1) The permitted facility must receive and maintain on file a characterization of the residual wastes it receives from the generator, as required by 25 Pa. Code 287.54. The characterization shall conform to the Bureau of Waste Management's Form 26R except as noted in paragraph (2), below. Each load of residual waste received must be characterized accordingly.

(2) For wastewater generated from hydraulic fracturing operations ("frac wastewater") within the first 30 production days of a well site, the characterization may be a general frac wastewater characterization approved by DEP. Thereafter, the characterization must be waste-specific and reported on the Form 26R.

b. Receipt of Municipal Waste

(i) The permittee shall document the receipt of all hauled-in municipal wastes (including but not limited to septage and liquid sewage sludge) received for processing at the treatment facility. The permittee shall report hauled-in municipal wastes on a monthly basis to DEP on the "Hauled In Municipal Wastes" Supplemental Report (3800-FM-BPNPSM0437) as an attachment to the DMR. If no municipal wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report:

(1) The dates that municipal wastes were received.

(2) The volume (gallons) of wastes received.

(3) The BOD_5 concentration (mg/l) and load (lbs) for the wastes received.

(4) The location(s) where wastes were disposed of within the treatment facility.

(ii) Sampling and analysis of hauled-in municipal wastes must be completed to characterize the organic strength of the wastes, unless composite sampling of influent wastewater is performed at a location downstream of the point of entry for the wastes. The influent BOD_5 characterization for the treatment facility, as reported in the annual Municipal Wasteload Management Report per 25 Pa. Code Chapter 94, must be representative of the hauled-in municipal wastes received.

4. Unanticipated Noncompliance or Potential Pollution Reporting

a. Immediate Reporting - The permittee shall immediately report any incident causing or threatening pollution in accordance with the requirements of 25 Pa. Code Sections 91.33 and 92a.41(b).

(i) If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify DEP by telephone of the location and nature of the danger. Oral notification to the Department is required as soon as possible, but no later than 4 hours after the permittee becomes aware of the incident causing or threatening pollution.

(ii) If reasonably possible to do so, the permittee shall immediately notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger.

(iii) The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.

b. The permittee shall report any noncompliance which may endanger health or the environment in accordance with the requirements of 40 CFR 122.41(l)(6). These requirements include the following obligations:

(i) 24 Hour Reporting - The permittee shall orally report any noncompliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported within 24 hours under this paragraph (40 CFR 122.41(l)(6)(ii)):

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit;

(2) Any upset which exceeds any effluent limitation in the permit; and

(3) Violation of the maximum daily discharge limitation for any of the pollutants listed in the permit as being subject to the 24-hour reporting requirement.

(ii) Written Report - A written submission shall also be provided within 5 days of the time the permittee becomes aware of any noncompliance which may endanger health or the environment. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(iii) Waiver of Written Report - DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by DEP, the permittee shall submit a written report in accordance with this paragraph. (40 CFR 122.41(l)(6)(iii))

5. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraph C.4 of this section or specific requirements of compliance schedules, at the time DMRs are submitted, on the Non-Compliance Reporting Form (3800-FM-BPNPSM0440). The reports shall contain the information listed in paragraph C.4.b.(ii) of this section. (40 CFR 122.41(l)(7))

PART B

I. MANAGEMENT REQUIREMENTS

A. Compliance Schedules (25 Pa. Code 92a.51, 40 CFR 122.47(a))

1. The permittee shall achieve compliance with the terms and conditions of this permit within the time frames specified in this permit.

2. The permittee shall submit reports of compliance or noncompliance, or progress reports as applicable, for any interim and final requirements contained in this permit. Such reports shall be submitted no later than 14 days following the applicable schedule date or compliance deadline. (40 CFR 122.47(a)(4))

B. Permit Modification, Termination, or Revocation and Reissuance

1. This permit may be modified, terminated, or revoked and reissued during its term in accordance with 25 Pa. Code 92a.72 and 40 CFR 122.41(f).

2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. (40 CFR 122.41(f))

3. In the absence of DEP action to modify or revoke and reissue this permit, the permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time specified in the regulations that establish those standards or prohibitions. (40 CFR 122.41(a)(1))

C. Duty to Provide Information

1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. (40 CFR 122.41(h))

2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this permit. (40 CFR 122.41(h))

3. Other Information - Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to DEP, it shall promptly submit the correct and complete facts or information. (40 CFR 122.41(l)(8))

4. The permittee shall provide the following information in the annual Municipal Wasteload Management Report, required under the provisions of Title 25 Pa. Code Chapter 94:

   a. The requirements identified in 25 Pa. Code 94.12.

   b. The identity of any indirect discharger(s) served by the POTW which are subject to pretreatment standards adopted under Section 307(b) of the Clean Water Act; the POTW shall also specify the total volume of discharge and estimate concentration of each pollutant discharged into the POTW by the indirect discharger.

   c. A "Solids Management Inventory" including the following information for the preceding year, at a minimum: average annual flow (MGD), average influent BOD_5 (mg/l), average effluent $CBOD_5$ (mg/l), total volume of sludge wasted (gallons), average solids concentration of return or waste sludge flow (mg/l), and total sludge or biosolids generated (wet or dry tons).

   d. The total volume of hauled-in residual and municipal wastes received during the year, by source.

e. The Annual Report requirements for permittees required to implement an industrial pretreatment program listed in Part C, as applicable.

D. General Pretreatment Requirements

1. POTWs shall require indirect dischargers to the treatment works subject to pretreatment standards adopted under Section 307(b) of the Clean Water Act to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act and regulations thereunder.

2. Any POTW (or combination of POTWs operated by the same authority) with a total design flow greater than 5 million gallons per day (MGD) and receiving from industrial users pollutants which pass through or interfere with the operation of the POTW or are otherwise subject to Pretreatment Standards will be required to establish a POTW Pretreatment Program unless specifically exempted by the Approval Authority. A POTW with a design flow of 5 MGD or less may be required to develop a POTW Pretreatment Program if the Approval Authority finds that the nature or volume of the industrial influent, treatment process upsets, violations of effluent limitations, contamination of sludge, or other circumstances warrant in order to prevent interference or pass through. (40 CFR 403.8)

3. Each POTW with an approved Pretreatment Program pursuant to 40 CFR 403.8 shall develop and enforce specific limits to implement the prohibitions listed in 40 CFR 403.5(a)(1) and (b), and shall continue to develop these limits as necessary and effectively enforce such limits. This condition applies, for example, when there are planned changes to the waste stream as identified in Part A III.C.2. If the permittee is required to develop or continue implementation of a Pretreatment Program, detailed requirements will be contained in Part C of this permit.

4. For all POTWs, where pollutants contributed by indirect dischargers result in interference or pass through, and a violation is likely to recur, the permittee shall develop and enforce specific limits for indirect dischargers and other users, as appropriate, that together with appropriate facility or operational changes, are necessary to ensure renewed or continued compliance with this permit or sludge use or disposal practices. Where POTWs do not have an approved Pretreatment Program, the permittee shall submit a copy of such limits to DEP when developed. (25 Pa. Code 92a.47(d))

E. Proper Operation and Maintenance

1. The permittee shall employ operators certified in compliance with the Water and Wastewater Systems Operators Certification Act (63 P.S. §§1001-1015.1).

2. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, adequate laboratory controls including appropriate quality assurance procedures. This provision also includes the operation of backup or auxiliary facilities or similar systems that are installed by the permittee, only when necessary to achieve compliance with the terms and conditions of this permit. (40 CFR 122.41(e))

F. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge, sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR 122.41(d))

G. Bypassing

1. Bypassing Not Exceeding Permit Limitations - The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions in paragraphs two, three and four of this section. (40 CFR 122.41(m)(2))

2. Other Bypassing - In all other situations, bypassing is prohibited and DEP may take enforcement action against the permittee for bypass unless:

   a. A bypass is unavoidable to prevent loss of life, personal injury or "severe property damage." (40 CFR 122.41(m)(4)(i)(A))

   b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance. (40 CFR 122.41(m)(4)(i)(B))

   c. The permittee submitted the necessary notice required in paragraph G.4 below. (40 CFR 122.41(m) (4)(i)(C))

3. DEP may approve an anticipated bypass, after considering its adverse effects, if DEP determines that it will meet the conditions listed in paragraph G.2 above. (40 CFR 122.41(m)(4)(ii))

4. Notice

   a. Anticipated Bypass – If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the bypass. (40 CFR 122.41(m)(3)(i))

   b. Unanticipated Bypass

      (i) The permittee shall submit immediate notice of an unanticipated bypass causing or threatening pollution. The notice shall be in accordance with Part A III.C.4.a.

      (ii) The permittee shall submit oral notice of any other unanticipated bypass within 24 hours, regardless of whether the bypass may endanger health or the environment or whether the bypass exceeds effluent limitations. The notice shall be in accordance with Part A III.C.4.b.

H. Sanitary Sewer Overflows (SSOs)

An SSO is an overflow of wastewater, or other untreated discharge from a separate sanitary sewer system (which is not a combined sewer system), which results from a flow in excess of the carrying capacity of the system or from some other cause prior to reaching the headworks of the sewage treatment facility. SSOs are not authorized under this permit. The permittee shall immediately report any SSO to DEP in accordance with Part A III.C.4 of this permit.

II. PENALTIES AND LIABILITY

A. Violations of Permit Conditions

Any person violating Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative and/or criminal penalties as set forth in 40 CFR §122.4l(a)(2).

Any person or municipality, who violates any provision of this permit; any rule, regulation or order of DEP; or any condition or limitation of any permit issued pursuant to the Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603 and 605 of the Clean Streams Law.

B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or

- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or noncompliance)

Shall, upon conviction, be punished by a fine and/or imprisonment as set forth in *18 Pa.C.S.A § 4904* and 40 CFR §122.41(j)(5) and (k)(2).

C. Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance pursuant to Section 309 of the Clean Water Act or Sections 602, 603 or 605 of the Clean Streams Law.

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under the Clean Water Act and the Clean Streams Law.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. 40 CFR 122.41(c)

III. OTHER RESPONSIBILITIES

A. Right of Entry

Pursuant to Sections 5(b) and 305 of Pennsylvania's Clean Streams Law, and Title 25 Pa. Code Chapter 92a and 40 CFR §122.41(i), the permittee shall allow authorized representatives of DEP and EPA, upon the presentation of credentials and other documents as may be required by law:

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; (40 CFR 122.41(i)(1))

2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; (40 CFR 122.41(i)(2))

3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and (40 CFR 122.41(i)(3))

4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Clean Streams Law, any substances or parameters at any location. (40 CFR 122.41(i)(4))

B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph 2 of this section, a permit may be transferred by the permittee to a new owner or operator only if this permit has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (40 CFR 122.61(a))

2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:

   a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; (40 CFR 122.61(b)(1))

b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; and (40 CFR 122.61(b)(2))

c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue this permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section. (40 CFR 122.61(b)(3))

d. The new permittee is in compliance with existing DEP issued permits, regulations, orders and schedules of compliance, or has demonstrated that any noncompliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedules set forth in the permit), consistent with 25 Pa. Code 92a.51 (relating to schedules of compliance) and other appropriate Department regulations. (25 Pa. Code 92a.71)

3. In the event DEP does not approve transfer of this permit, the new owner or controller must submit a new permit application.

C. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege. (40 CFR 122.41(g))

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit. (40 CFR 122.41(b))

E. Other Laws

The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations.

IV. ANNUAL FEE

Permittees shall pay an annual fee in accordance with 25 Pa. Code § 92a.62. Annual fee amounts are specified in the following schedule and are due on each anniversary of the effective date of the most recent new or reissued permit. All flows identified in the schedule are annual average design flows. (25 Pa. Code 92a.62)

Small Flow Treatment Facility (SRSTP and SFTF)	$0
Minor Sewage Facility < 0.05 MGD (million gallons per day)	$250
Minor Sewage Facility ≥ 0.05 and < 1 MGD	$500
Minor Sewage Facility with CSO (Combined Sewer Overflow)	$750
Major Sewage Facility ≥ 1 and < 5 MGD	$1,250
Major Sewage Facility ≥ 5 MGD	$2,500
Major Sewage Facility with CSO	$5,000

As of the effective date of this permit, the facility covered by the permit is classified in the following fee category: **Major Sewage Facility with CSO**.

Invoices for annual fees will be mailed to permittees approximately three months prior to the due date. In the event that an invoice is not received, the permittee is nonetheless responsible for payment. Throughout a five year permit term, permittees will pay four annual fees followed by a permit renewal application fee in the last year of permit coverage. Permittees may contact the DEP at 717-787-6744 with questions related to annual fees. The fees identified above are subject to change in accordance with 25 Pa. Code 92a.62(e).

Payment for annual fees shall be remitted to DEP at the address below by the anniversary date. Checks should be made payable to the Commonwealth of Pennsylvania.

PA Department of Environmental Protection
Bureau of Point and Non-Point Source Management
Re: Chapter 92a Annual Fee
P.O. Box 8466
Harrisburg, PA 17105-8466

PART C

I. OTHER REQUIREMENTS

A. Notification of the designation of the responsible operator must be submitted to the permitting agency by the permittee within 60 days after the effective date of the permit and from time to time thereafter as the operator is replaced.

B. For reporting purposes on the DMR, the term "average weekly" shall mean the highest average weekly value observed during the monthly monitoring period.

C. If, at any time, the DEP determines that the discharge permitted herein creates a public nuisance or causes environmental harm to the receiving water of the Commonwealth, the DEP may require the permittee to adopt such remedial measures as will produce a satisfactory effluent. If the permittee fails to adopt such remedial measures within the time specified by the DEP, the right to discharge herein granted shall, upon notice by the DEP, cease and become null and void.

D. The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance, and replacement of all sewers or sewerage structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.

E. The CBOD20 in the raw wastewater shall be reduced by at least 89 1/4 percent as a monthly average in accordance with the requirements of the Delaware River Basin Commission for Zone 4 of the Delaware Estuary. This requirement is not applicable for those days during wet weather events, when average daily flow rate exceeds 66 mgd.

The percent removal shall be calculated from the weekly 24-hour composite samples of the influent and effluent. The influent samples must reflect true characteristics of the raw wastewater and must not be affected by plant recycle flows.

F. Analysis for the following pollutant(s) shall be performed using the following test method(s) contained in 40 C.F.R. Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants, or any approved test method(s) of equal or greater sensitivity:

Parameter	Test Method
Lead, Total	200.7 (ICP/AES)
Cadmium, Total	200.8 (ICP/MS)
Copper, Total	200.7 (ICP/AES)
Zinc, Total	200.7 (ICP/AES)
Cyanide, Total	335.4 (Color, Auto)

G. If there is a change in ownership of this facility or in the name of the permittee, an application for transfer of the permit must be submitted to the DEP.

H. Requirements for Total Residual Chlorine (TRC)

Source Reduction and Chlorine Minimization

To reduce or eliminate the amount of chlorine discharged into water bodies, the permittee must

1. Implement source reduction activities 2. Improve operation/maintenance practices, and
3. Improve/adjust process controls.

The permittee will ensure that applied chlorine dosages, used for disinfection or other purposes, are optimized to the degree necessary such that the total residual chlorine in the discharge does not cause an adverse stream impact. In doing so, the permittee shall consider relevant factors affecting chlorine

dosage, such as wastewater characteristics, mixing and contact times, desired result of chlorination, and expected impact on the receiving water body.

The effluent limits for total residual chlorine contained in PART A of the permit is 0.5 mg/l as an average monthly limit. The limit is based on the data of the chlorine demand of the Delaware River during low tide conditions. DEP reserves the right to revise TRC limit based on additional data in the future collected during low and high tides conditions in the Delaware River.

If the DEP determines or receives documented evidence that levels of TRC in the discharge are causing adverse water quality impacts in the receiving water, the permittee shall be required to institute necessary additional steps to reduce or eliminate such impact.

I. Collected screenings, slurries, sludges, and other solids shall be handled and disposed of in compliance with 25 Pa. Code, Chapters 271, 273, 275, 281, 283, and 285 (relating to general provisions and requirements for landfilling, land application, composting, processing, and storage of municipal waste), Chapters 261a, 262a, 263a, and 270a (related to identification of hazardous waste, requirements for generators and transporters, and hazardous waste permit programs) and applicable Federal Regulations, the Federal Clean Water Act, RCRA, and their amendments.

J. The DEP may identify and require certain discharge specific data to be submitted before the expiration date of this permit. Upon notification by the DEP, the permittee will have 12 months from the date of the notice to provide the required data. These data, along with any other data available to the DEP, will be used in completing the Watershed TMDL/WLA Analysis and in establishing discharge effluent limits. In the event that DEP requires the submission of data pursuant to this condition, the permittee shall have the right to appeal or otherwise contest the requirement.

K. Instantaneous maximum limitations are imposed to allow for a grab sample to be collected by the appropriate regulatory agency to determine compliance. The permittee does not have to monitor for the instantaneous maximum limitation except for the parameters oil and grease, pH, total residual chlorine, and fecal coliform. However, if grab samples are collected for parameters normally monitored through composite sampling, the results must be reported.

L. The permittee shall operate the sewage treatment plant to provide treatment for the peak design wastewater without causing treatment plant upsets. Throttling of influent flows to the plant resulting in avoidable, premature sewer system overflows is prohibited.

M. The permittee shall monitor the overflow from the raw sewage pump station (EPS-1) at the sewage treatment plant during each overflow event. The date, time and volume shall be recorded and submitted to the DEP within 28 days after the end of each overflow event. Use the enclosed overflow report form.

N. The Commonwealth's Clean Streams Law (P.L. 1987, No. 394) delegates the authority to preserve and improve the purity of its waters and develop remedies to purify those waters currently polluted to DEP, in the form of adopting rules and regulations as necessary to accomplish these tasks. Water Quality analyses performed for the major watershed of the Commonwealth to date show that many of the rivers and streams of Pennsylvania have a very limited ability to assimilate additional total dissolved solids (TDS). TDS can adversely affect aquatic life due to increases in salinity. The major concern associated with high TDS concentrations relates to direct effects of increased salinity on the health of aquatic organisms and potable water supplies. The Department has begun the process of modifying regulations for TDS, chlorides, and sulfates that are designed to protect stream uses. The permit may be modified when these regulatory changes go into effect. At such time, the current TDS limits may be modified through an amendment to the permit.

O. The authorization to discharge 50 mgd of wastewater as contained in Part A of this permit is subject to the fact that construction/modification of the plant is completed in accordance with the Water Quality Management Permit No. 2311402 issued on December 6, 2011.

P. This permit may be modified or revoked and reissued, as provided pursuant to 40 C.F.R. 122.62 and 124.5, for the following reasons:

1. To include new or revised conditions developed to comply with any State or Federal law or regulation that addresses CSOs that is adopted or promulgated subsequent to the effective date of this permit.

2. To include new or revised conditions if new information, not available at the time of permit issuance, indicates that CSO controls imposed under the permit have failed to ensure the attainment of State Quality Standards.

3. To include new or revised conditions based on new information resulting from implementation of the long-term control plan.

In addition, this permit may be modified or revoked and reissued for any reason specified in 40 C.F.R. 122.62.

Q. Laboratory Certification

The Environmental Laboratory Accreditation Act of 2002 requires that all environmental laboratories register with the DEP. An environmental laboratory is any facility engaged in the testing or analysis of environmental samples required by a statute administered by the DEP relating to the protection of the environment or of public health, safety, and welfare.

R. The seasonal effluent limitations for fecal coliform are based on Chapter 92a (§ 92a.47(4) & (5)) of DEP's regulations and Delaware River Basin Commission's (DRBC's) Water Quality Regulations at § 4.30.4.A. DEP's regulations govern the summer limits for fecal coliform while the winter limits are based on DRBC's regulations. The DRBC regulations state that during winter season from October through April, the instantaneous maximum concentration of fecal coliform organisms shall not be greater than 1,000 per 100 milliliters in more than 10 percent of the samples tested. For reporting purposes, a copy of the guidelines on the 10 percent rule is enclosed with the permit.

S. On December 15, 2003, the U.S. Environmental Protection Agency (EPA), Regions 2 and 3, adopted a Total Maximum Daily Loads (TMDLs) for Polychlorinated Biphenyls (PCBs) for Zones 2, 3, 4, and 5 of the tidal Delaware River. The TMDLs require the facilities identified as discharging PCBs to these zones of the Delaware River or to the tidal portions of tributaries to these zones to conduct monitoring for 209 PCB congeners, and prepare and implement a PCB Pollutant Minimization Plan (PMP).

This facility has been identified as a Group 1 discharger. Group 1 dischargers have detected 4 or more PCB congeners and contribute to 99% of the cumulative PCB loading to Zones 2-5. Accordingly, the permittee shall collect one 24-hour composite sample per six months during a wet weather flow and one 24-hour composite sample per six months during a dry weather flow. The samples shall be collected from Outfall 001. The permittee shall report total PCB values on the DMR form from all these test results.

Sample collection protocols and criteria referenced at http://www.state.nj.us/drbc/quality/toxics/pcbs/monitoring.html shall be followed. All sample analyses shall be performed using EPA Method 1668A, Revision A: Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by HRGC/HRMS. EPA-821-R-00-002, December 1999 as supplemented or amended, and results for all 209 PCB congeners shall be reported. Project-specific analytical modifications, and reporting requirements found are at http://www.state.nj.us/drbc/quality/toxics/pcbs/monitoring.html shall be followed. Monitoring information, sample data, and reports associated with PCB monitoring shall be submitted to the DEP and DRBC in the form of two compact discs in the format referenced at http://www.state.nj.us/drbc/library/documents/PCB-EDD011309.pdf .

In accordance with the U.S. EPA, Regions 2 and 3, TMDLs for PCBs for Zones 2–5 of the Tidal Delaware River Estuary, the permittee submitted a PMP for PCBs to the DRBC in October 2005, *which was approved on* January 17, 2006.Therefore, the permittee shall:

i. Continue to implement the PMP to achieve PCB loading reduction goals, and;

ii. Submit an Annual Report to DRBC and the Department consistent with the guidance specified at http://www.state.nj.us/drbc/programs/quality/pmp.html. This Annual Report is due by January 31 of each year.

The PMP Annual Report and PCB data shall be submitted to the Department and DRBC at the following addresses:

PA Department of Environmental Protection
Southeast Regional Office
Clean Water Program
2 East Main Street
Norristown, PA 19401

Delaware River Basin Commission
Modeling, Monitoring & Assessment Branch
P.O. Box 7360
West Trenton, NJ 08628

T. The permittee shall not accept wastewater from natural gas well drilling, hydraulic fracturing or natural gas production for treatment and disposal at the DELCORA STP. If in the future the permittee proposes to accept these types of waste streams, the permittee must obtain approval from DEP prior to accepting these types of waste streams.

U. Within 30 days of the completion of construction of the outfall extension, the permittee shall notify DEP of such completion.

II. WHOLE EFFLUENT TOXICITY

Acute Testing

The permittee must perform quarterly Whole Effluent Toxicity (WET) tests to generate acute toxicity data on the cladoceran, *Ceriodaphnia dubia* and the fathead minnow, *Pimephales promelas* for the permit term. Acute toxicity testing shall follow Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002 (EPA-821-R-02-012). The dilution series to be used is 100%, 50%, 25%, 12.5% and 6.25%. The results shall be reported as Lethal Concentration for 50 percent of the population (LC_{50}) and Acute Toxic Units (TUa) at 48-hour and 96-hour durations for the fathead minnow *Pimephales promelas* and at a 48-hour duration for the cladoceran, *Ceriodaphnia dubia* . The calculated Acute Target In-stream Waste Concentration (TIWCa) is 62%.

Chronic Testing

The permittee must perform quarterly WET tests to generate chronic toxicity data on the cladoceran, *Ceriodaphnia dubia* and the fathead minnow, *Pimephales promelas* for the permit term. The results shall be reported as No Observed Effect Concentration (NOEC) and Chronic Toxic Units (TUc) with a Percent Minimum Significant Difference (PMSD) reported. The results shall also be reported as Inhibitory Concentration, 25 percent (IC_{25}). The testing should follow USEPA guidance on Short-Term Methods for Estimating the Chronic

Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA 821-R-02-013, 4th Edition, 2002). The dilution series to be used is 100%, 50%, 25%, 12.5% and 6.25%. The calculated Chronic Target In-stream Waste Concentration (TIWCc) is 18%.

The complete laboratory reports with a summary page of results from the testing must be submitted to the DRBC and DEP at the addresses listed below:

Dr. Thomas Fikslin
Delaware River Basin Commission
P.O. Box 7360
West Trenton, NJ 08628-0360

Department of Environmental Protection
Clean Water Program
2 East Main Street
Norristown, PA 19401

III. POTW PRETREATMENT PROGRAM IMPLEMENTATION

A. General Requirement – The permittee shall operate and implement a POTW pretreatment program in accordance with the federal Clean Water Act, the Pennsylvania Clean Streams Law, and the federal General Pretreatment Regulations at 40 CFR Part 403. The program shall also be implemented in accordance with the permittee's approved pretreatment program and any modifications thereto submitted by the permittee and approved by the Approval Authority.

B. Annual Report and Other Requirements – The permittee shall submit a Pretreatment Annual Report by March 31 of each year to EPA that describes the permittee's pretreatment activities for the previous calendar year. The Pretreatment Annual Report shall include a description of pretreatment activities in all municipalities from which wastewater is received at the permittee's POTW. A summarized discussion shall be incorporated into the permittee's Annual Municipal Wasteload Management Report required by 25 Pa. Code Chapter 94 and referenced in Part B I.C.4 of this permit. The Pretreatment Annual Report shall include the following information, at minimum:

1. Industrial Listing – The Annual Report shall contain an updated industrial listing providing the names and addresses of all current Significant Industrial Users (SIUs) and Non-Significant Categorical Industrial Users (NSCIUs), as defined in 40 CFR 403.3, and the categorical standard, if any, applicable to each. The listing must: (1) identify any users that are subject to reduced reporting requirements under 40 CFR 403.12(e)(3); (2) identify which users are NSCIUs; (3) identify any users that have been granted a monitoring waiver in accordance with 40 CFR 403.12(e)(2) as well as the pollutants for which the waiver was granted and the date of the last POTW sampling event for each pollutant; and (4) identify any categorical industrial users that have been given mass-based limits in place of concentration-based categorical limits in accordance with 40 CFR 403.6(c)(5) or concentration-based limits in place of mass-based categorical limits in accordance with 40 CFR 403.6(c)(6).

   In addition, the Annual Report shall contain a summary of any hauled-in wastes accepted at the POTW including the source of the wastes (domestic, commercial or industrial) and the receiving location for acceptance of the wastes. For each industrial source (whether or not classified as an SIU), the report shall indicate (1) the name and address of the industrial source; (2) the average daily amount of wastewater received; (3) a brief description of the type of process operations conducted at the industrial facility; (4) whether the source facility is a categorical industrial user (including NSCIU), significant industrial users, or non-significant industrial user; and (5) any controls imposed on the user.

2. Control Mechanism Issuance – The Annual Report shall contain a summary of SIU control mechanism issuance, including a list of issuance, effective, and expiration dates for each SIU control mechanism. For each general control mechanism issued, provide the names of all SIUs covered by the general control mechanism and an explanation of how the users meet the criteria of 40 CFR 403.8(f)(1)(iii)(A) for issuance of a general control mechanism.

3. Sampling and Inspection – The Annual Report shall contain a summary of the number and types of inspections and sampling events of SIUs by the permittee, including a list of all SIUs either not sampled or not inspected, and the reason that the sampling and/or inspection was not conducted. For any user subject to reduced reporting under 40 CFR 403.12(e)(3), the list shall include the date of the last POTW sampling event and the date of the last POTW inspection of the user. In addition, the report shall include a summary of the number of self-monitoring events conducted by each SIU and the number required to be conducted, including a list of all SIUs that did not submit the required number of reports and the reason why the reports were not submitted. For NSCIUs, the report shall provide the date of the compliance certification required under 40 CFR 403.12(q).

4. Industrial User Compliance and POTW Enforcement – The Annual Report shall contain a summary of the number and type of violations of pretreatment standards and requirements, including local limits, and the actions taken by the permittee to obtain compliance, including compliance schedules, penalty assessments and actions for injunctive relief. The report shall state whether each SIU was in significant noncompliance, as that term is defined in 40 CFR Section 403.8(f)(2)(viii), and include the parameter(s) in violation, the period of violation, the actions taken by the POTW in response to the violations, and the compliance status at the end of the reporting period. A copy of the publication of users meeting the significant noncompliance criteria shall be included. In addition, the report shall provide a list of users previously designated as NSCIUs that have violated (to any extent) any pretreatment standard or requirement during the year and the date and description of the violation(s).

5. Summary of POTW Operations – The Annual Report shall contain a summary of any interference, pass-through, or permit violations by the POTW and indicate the following: (1) which, if any, permit violations may be attributed to industrial users; (2) which IU(s) are responsible for such violations; and (3) the actions taken to address these events. The report shall also include all sampling and analysis of POTW treatment plant influent, effluent, and sludge conducted during the year for local limit and priority pollutants identified pursuant to Section 303(d) of the Clean Water Act, 33 U.S.C. 1313(d).

6. Pretreatment Program Changes – The Annual Report shall contain a summary of any changes made or proposed to the approved program during the period covered by the report and the date of submission to the Approval Authority.

C. Routine Monitoring – The permittee shall conduct monitoring at its treatment plant that, at a minimum, includes quarterly influent, effluent, and sludge analysis for all pollutants for which local limits have been established, and an annual priority pollutant scan for influent and sludge.

D. Notification of Pass Through or Interference – The permittee shall notify EPA and DEP, in writing, of any instance of pass through or interference, as defined at 40 CFR 403.3(p) and (k), respectively, known or suspected to be related to a discharge from an IU into the POTW. The notification shall be attached to the DMR submitted to EPA and DEP and shall describe the incident, including the date, time, length, cause (including responsible user if known), and the steps taken by the permittee and IU (if identified) to address the incident. A copy of the notification shall also be sent to the EPA at the address provided below.

E. Adopt Local Limits – The permittee shall adopt the revised local limits within 60 days of EPA approval of local limits and notify all contributing municipalities and industrial users of the revised local limits.

F. Changes to Pretreatment Program – EPA and DEP may require the permittee to submit for approval changes to its pretreatment program if any one or more of the following conditions is present:

1. The program is not implemented in accordance with 40 CFR Part 403;

2. Problems such as interference, pass through or sludge contamination develop or continue;

3. The POTW proposes to introduce new pollutants or an increased loading of approved pollutants as described in Part A III.C.2 of this permit;

4. Federal, State, or local requirements change;

5. Changes are needed to assure protection of waters of the Commonwealth.

Program modification is necessary whenever there is a significant change in the operation of the pretreatment program that differs from the information contained in the permittee's submission, as approved under 40 CFR 403.11.

G. Procedure for Pretreatment Program Changes – Upon submittal by the permittee, and written notice of approval by the Approval Authority to the permittee of any changes to the permittee's approved pretreatment program, such changes are effective and binding upon the permittee unless the permittee objects within 30 days of receipt of the written notice of approval. Any objection must be submitted in writing to EPA and DEP.

H. Correspondence – The Approval Authority shall be EPA at the following address;

Pretreatment Coordinator (3WP41)
U.S. Environmental Protection Agency
1650 Arch Street
Philadelphia, PA 19103-2029

IV. REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS

A. Prohibition of Nonstormwater Discharges

1. Except as provided in A.2, all discharges to stormwater Outfalls 028, 029,030, and 031 shall be composed entirely of stormwater and allowable nonstormwater as specified in A.2 below.

2. The following nonstormwater discharges may be authorized, provided the discharge is in compliance with D.2.b: discharges from fire fighting activities; fire hydrant flushings, potable water sources, including waterline flushings, irrigation drainage, lawn watering, routine external building washdown which does not use detergents or other compounds, pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used, air conditioning condensate, springs, uncontaminated groundwater, and foundation or footing drains where flows are not contaminated with process materials such as solvents.

B. Spills

This permit does not authorize the discharge of any polluting substances resulting from an on-site spill. Such spills shall be controlled through proper implementation of a Preparedness, Prevention, and Contingency (PPC) Plan as stated in Section D below.

C. This permit does not authorize any discharge (stormwater or nonstormwater) containing any pollutant that may cause or contribute to an impact on aquatic life or pose a substantial hazard to human health or the environment due to its quantity or concentration.

D. Preparedness, Prevention, and Contingency Plans

1. Development of Plan

Operators of facilities shall have developed a PPC Plan in accordance with 25 Pa. Code Section 91.34 and the "Guidelines for the Development and Implementation of Environmental Emergency Response Plans." The PPC Plan shall identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the facility. In addition, the PPC Plan shall describe the BMPs that are to be used to reduce the pollutants in stormwater discharges at the facility ensuring compliance with the terms and conditions of this permit. The PPC Plan shall be completed within 150 days from the permit effective date, if it has not been completed yet or if it needs an update.

2. Nonstormwater Discharges

   a. The PPC Plan shall contain a certification that the discharge has been tested or evaluated for the presence of nonstormwater discharges. The certification shall include the identification of potential significant sources of nonstormwater at the site, a description of the results of any test and/or evaluation for the presence of nonstormwater discharges, the evaluation criteria or testing methods used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. Such certification may not be feasible if the facility operating the stormwater discharge does not have access to an outfall, manhole, or other point of access to the ultimate conduit that receives the discharge. In such cases, the source identification section of the PPC Plan shall indicate why the certification was not feasible. A discharger that is unable to provide the certification must notify the DEP within 90 days of the effective date of this permit.

   b. Except for flows from fire fighting activities, sources of nonstormwater listed in A.2. (authorized nonstormwater discharges) that are combined with stormwater discharges must be identified in the Plan. The Plan shall identify and ensure the implementation of appropriate pollution prevention measures for the nonstormwater component(s) of the discharge.

3. Special Requirements for SARA Title III, Section 313 Facilities

   a. Facilities subject to SARA Title III, Section 313 shall include in the PPC Plan a description of releases to land or water of Section 313 water priority chemicals that have occurred within the last three years. Each of the following shall be evaluated for the reasonable potential for contributing pollutants to runoff: loading and unloading operations, outdoor storage activities, outdoor manufacturing or processing activities, significant dust or particulate generating process, and on-site waste disposal practices. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with stormwater; and history of significant leaks or spills of toxic or hazardous pollutants.

   b. Engineering Certification. No stormwater PPC Plan for facilities subject to SARA Title III, Section 313 requirements for chemicals that are classified as "Section 313 water priority chemicals" shall be effective unless it has been reviewed by a Registered Professional Engineer and certified to by such Professional Engineer. A Registered Professional Engineer shall recertify the PPC Plan every year thereafter. This certification may be combined with the required annual evaluation in D.4. By means of these certifications, the engineer, having examined the facility and being familiar with the provisions of this part, shall attest that the storm water PPC Plan has been prepared in accordance with good engineering practices. Such certification shall in no way relieve the owner or operator of a facility covered by the PPC Plan of the duty to prepare and fully implement such Plan.

4. Comprehensive Site Compliance Evaluations and Recordkeeping

   Qualified personnel shall conduct site compliance evaluations at least once a year. Such evaluations shall include:

   a. Visual inspection and evaluation of areas contributing to a stormwater discharge for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural stormwater management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the Plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the Plan, such as spill response equipment, shall be made.

   b. Based on the results of the inspection, the description of potential pollutant sources identified in the PPC Plan, and pollution prevention measures and controls identified in the Plan shall be revised as appropriate within 15 days of such inspection and shall provide for implementation of any changes to the Plan in a timely manner, but in no case more than 90 days after the inspection.

c. A report summarizing the scope of the inspection, using the DEP's Annual Inspection form shall be completed and made available upon request and retained as part of the PPC Plan for at least one year after coverage under this permit terminates.

E. Stormwater Sampling and Reporting

1. If stormwater samples are required by this permit, they shall be collected as grab samples during the first 30 minutes, but no later than one-hour of the discharge resulting from a storm event that occurs at least 72 hours from the previously measurable storm event.

2. When the discharger is unable to collect samples due to adverse climatic conditions, the discharger must submit, in lieu of sampling data, a description of why samples could not be collected, including available documentation of the event. This sampling waiver may not be used more than once during a two-year period.

3. Stormwater monitoring results shall be summarized on a DMR form and the DEP's "Additional Information for the Reporting of Stormwater Monitoring" form.

4. When a facility has two or more outfalls that may reasonably be believed to discharge substantially identical effluents, based on a consideration of features and activities within the area drained by the outfall, the permittee may sample one such outfall and report that the quantitative data also applies to the substantially identical outfalls.

   Outfall 028 has been determined to be representative of Outfalls 029, 030, and 031.

5. The following table describes the outfall locations and drainage areas:

Outfall No.	Acreage	Latitude	Longitude	Area Description
028	7.5	39° 49' 30"	75° 23' 45"	Primary treatment units and parking area around the administrative buildings (B2 and B5).
029	11.25	39° 49' 30"	75° 23' 30"	Primary treatment units, sludge storage and processing, truck loading, and waste storage.
030	6.25	39° 49' 30"	75° 23' 45"	Secondary treatment units.
031	6.25	39° 49' 30"	75° 23' 30"	Secondary treatment units, and former ash lagoon.

F. Stormwater Best Management Practices (BMPs)

The permittee shall implement at least the following BMPs:

- Manage sludge in accordance with all applicable permit requirements; temporarily collect and store sludge in enclosed containers or tanks.

- Store chemicals in secure and covered areas on impervious surfaces away from storm drains.

- For new facilities and improvements: Design wastewater treatment facilities to avoid, to the maximum extent practicable, storm water commingling with sanitary wastewater.

- Efficiently use herbicides for weed control; where practicable, investigate use of the least toxic herbicides; do not apply during windy conditions.

- Do not wash parts or equipment over impervious surfaces that wash into storm drains.

- Conduct Good Housekeeping Practices.

- Implement infiltration techniques, including infiltration basins, trenches, dry wells, porous pavements, etc., wherever practicable.

V. COMBINED SEWER OVERFLOWS

A. Management and Control of Combined Sewer Overflows

1. CSOs are point source discharges that must be provided control measures in accordance with the Federal Clean Water Act and the 1994 National CSO Policy. The point source discharges listed on PART A serve as combined sewer reliefs necessitated by stormwater entering the sewer system and exceeding the hydraulic capacity of the sewers and/or the treatment plant. CSOs are allowed to discharge only when flows in combined sewer systems exceed conveyance or treatment capacities of the system during wet weather periods. Dry weather overflows are prohibited.

2. Water bodies receiving CSO discharges in the DELCORA-STP service area covering this permit include the Delaware River, Chester, and Ridley Creeks.

B. Continued Implementation of Technology-Based Nine Minimum Controls

The permittee shall submit an annual report by March 31 each year to the DEP, with the appropriate documentation, demonstrating continued implementation of and compliance with the following nine minimum technology-based controls (NMCs) required on a system wide basis:

1. Proper Operation and Maintenance

2. Maximum Use of the Collection System

Where possible, DELCORA shall maximize the in-line storage capacity of the collection system, and shall keep records to document implementation.

3. Review/Modification of pre-treatment program

DELCORA shall continue to implement selected CSO controls to minimize the impact of nondomestic discharges on CSOs. DELCORA shall reevaluate, at an appropriate frequency, whether additional modifications to its pretreatment program are feasible or of practical value. DELCORA shall keep records to document this evaluation and implementation of the selected CSO controls to minimize CSO impacts resulting from nondomestic discharges.

4. Maximization of flow to the POTW for treatment

DELCORA shall operate the POTW treatment plant at maximum treatable flow during wet weather flow conditions/events and deliver all flows to the treatment plant within the constraints of the capacity of the localized conveyance capacities of the sewer system and the capacity of the treatment plant. DELCORA shall keep records to document these actions.

5. Elimination of dry weather CSOs

Dry weather overflows from CSO outfalls are prohibited. When DELCORA detects a dry weather overflow, corrective action work shall begin immediately. DELCORA shall inspect the dry weather overflow each subsequent day until the overflow has been eliminated. DELCORA shall record dry weather overflows in the inspection logbook. Recorded information shall include the cause of the overflow, corrective measures taken, and the dates of the beginning and cessation of the overflow.

6. Controls of solids and floatables:

   DELCORA shall implement measures to control solids and floatable materials in the CSOs. These measures shall include, but are not be limited to:

   a. Augmentation of the City of Chester's storm sewer inlet replacement program to reimburse the City for inlets it replaces beyond those currently funded up to an amount not to exceed $75,000 per year for a 12-year period.

   b. Increasing public awareness through public education and information programs.

7. Pollution prevention programs

   DELCORA shall implement a pollution prevention program focused on reducing the impact of CSOs on receiving waters. DELCORA shall keep records to document pollution prevention implementation activities.

8. Public notification of CSO occurrence/impacts:

   DELCORA shall continue to implement a public notification plan to inform citizens of when and where CSOs occur. The process must include:

   a. A series of sensors and a model to determine the duration and amount of discharge to the receiving water body.

   b. Maintain, where accessable to the public, CSO outfall signage to indicate locations of CSOs.

   c. Inform the public through an annual newsletter or brochure describing CSO issues, the LTCP, and project benefits or sewer impact issues

9. Monitoring to effectively Characterize CSO Impacts and the Efficiency of CSO Controls:

   The permittee shall report on the status and effectiveness of each of the NMCs in the Annual "CSO" Status Report. The permittee shall incorporate "CSO" discharge characterizations in its comprehensive watershed assessment program to assess program performance.

C. Implementation of Water Quality-Based Long Term Control Plan (LTCP)

1. DELCORA submitted the updated Long Term Control Plan to EPA on February 1, 2011. DELCORA shall continue implementation of the April 1999 LTCP and July 2008 addendum to the LTCP until the updated plan is approved. Implementation of the updated plan shall result in compliance with water quality standards. The updated LTCP must be in accordance with the 1994 National CSO Control Policy.

2. The LTCP requires Public Participation in accordance with EPA Guidance Document No. EPA 832-B-95-002, entitled "*Guidance for Long Term Control Plan.*"

3. The permittee shall implement Phases I and II of the existing LTCP in accordance with the following schedule:

   a. Phase I - Implementation of the Nine Minimum Controls (NMC). Implementation of the NMC is currently underway and shall continue in accordance with DELCORA's *CSO* Documentation:

Delaware County Regional Water Quality Control Authority (DELCORA) Western Regional Treatment Plant (WRTP) Nine (9) Minimum Controls (NMC) for Correction of Combined Sewer Overflows (CSO), Manual, dated July 1995.

b. Phase II - Completion of Capital Improvements Projects - Implementation of the Capital Improvements shall be in accordance with the CSO LTCP schedule. The projects and estimated completion dates are as follows:

LTCP Reference (April 1999)				
Project			**Page**	**Completion Date**
1.	Regulator Replacement and Tide Gate Monitoring:			
	a.	Replace all McNulty Regulators, at least one per year, with Brown and Brown regulators.	6-2	See Below
	b.	Install regulator and tide gate monitoring system on newly installed Brown and Brown regulators.	6-1	See Below

Regulator Replacement and Tide Gate Monitoring System Installation Schedule (Per July 2008 LTCP addendum)

i. DELCORA has replaced the following Regulators since LTCP was approved in 1999:

Regulator Nos.	Location	Receiving Water Body	Descriptions (Regulator Size, Type and back Flow devices)
002	Front and Booth	Delaware River	5" x 7½" Brown & Brown
003	Front and Highland	Delaware River	7½" x 7¾" Brown & Brown
005	Front and Townsend	Delaware River	12" x 12" Brown & Brown with Double Tide Gate
008	2nd and Tilghman	Delaware River	7½" x 12⅜" Brown & Brown with Double Tide Gate
009	2nd and Lloyd	Delaware River	7½" x 12⅜" Brown & Brown with Double Tide Gate
011	2nd and Parker	Delaware River	5" x 9¼" Brown & Brown
012	2nd and Edgmont	Chester Creek	Brown & Brown with 24" x 24" Rubber Tide Gate
016	8th and McDowell	Ridley Creek	7½" x 12⅜" Brown & Brown with Double 60" x 60" Rubber Tide Gate
020	Kerlin and Finland	Chester Creek	7½" x 7¾" Brown & Brown
021	9th and Sproul	Chester Creek	7½" x 7¾" Brown & Brown with Double 18" x 18" Rubber Tide Gate
022	6th and Sproul	Chester Creek	5" x 6" Brown & Brown
023	3rd and Edgmont	Chester Creek	7½" x 7¾" Brown & Brown with Double 36" x 36" Rubber Tide Gate
024	3rd and Dock	Chester Creek	5" x 9¼" Brown & Brown with Double 48" x 48" Rubber Tide Gate
025	5th and Penn	Chester Creek	5" x 6" Brown & Brown with Double 36" x 36" Rubber Tide Gate
026	7th and Penn	Chester Creek	7½" x 12⅜" Brown & Brown

ii. The following Regulator replacement (Capital Improvement Projects) is planned beyond year 2012:

Completion Year	Regulator Nos.	Location	Receiving Water Body	Descriptions (Regulator Size, Type, and Back Flow Devices)
2014	013	2nd and Welsh	Delaware River	8" McNulty
2015	010	5th and Pusey	Delaware River	12" McNulty
2017	014	3rd and Upland	Delaware River	8" McNulty
2018	004	Front and Hayes	Delaware River	8" McNulty with Duckbill
2020	018	Sun Drive and Hancock	Ridley Creek	5" x 6" Brown & Brown with Tide Gate
2021	017	9th and Campbell	Ridley Creek	5" x 6" Brown & Brown with Single Neehah Cast Iron Tide Gate
2022	015	4th and Melrose	Ridley Creek	5" x 6" Brown & Brown with Single Neehan No. R-50-50-SF-36 Tide Gate
2023	007	Delaware and Reaney	Delaware River	5" x 6" Brown & Brown
2024	019	14th and Crozer Hospital	Chester Creek	7½" x 15⅜" Brown & Brown

The DEP recognizes that the estimated completion dates for the capital improvement projects contained in this permit may not be achieved as a result of factors beyond the permitte's reasonable controls, such as force majeure events. Such force majeure events include, but is not limited to, weather delays, labor actions, poor, or untimely performance by the permittee's contractors, changes to the construction plans, or methods of construction which could not be seen reasonable foreseen by the permitted, etc. Should a force majeure event occur, the DEP may extend the estimated completion date so as to compensate the permitted for the time lost due to force majeure event.

LTCP Reference (April 1999)			
Project		**Page**	**Completion Date**
2.	Inlet Replacement:	4-5 and 6-3	*
3.	Modified Sewer Cleaning Program:		
	Implement the modified sewer cleaning program as developed in CY2000.	6-3	Ongoing Basis
4.	Ongoing Monitoring Program Impacts:		
	Implement ongoing monitoring program.	6-6	Ongoing Basis
5.	Public Information/Education Program:		
	Update newsletter describing CSO Issues, the LTCP and project benefits	6-4	**

*DELCORA shall augment the City of Chester's storm sewer replacement program by reimbursing the city for inlets it replaces beyond those currently funded up to an amount not to exceed $75,000 per year for a

period of 12 years. It is intended that the inlets replaced with these funds be located in areas with severe debris problems or in areas tributary to Chester or Ridley Creeks.

**DELCORA shall continue mailing newsletter by August 31 annually describing CSO issues as detailed in nine Minimum Control Plans, under the LTCP, and the projected benefits of the program on an ongoing basis. Public input will be considered in an annual program review conducted by DELCORA.

D. Ongoing Monitoring Program:

DELCORA shall monitor the wastewater at the following three locations within 30 minutes of a rainfall and submit a report to the DEP, within 28 days of the sampling event:

1. 2nd and Dock Streets Pump Station (sample wet well).

2. CSO Outfall 018 – Sun Drive and Hancock Street.

3. CSO Outfall 019 – 14th Street and Crozer Hospital.

The monitoring frequency, parameters, and sample type are as follows:

Parameter	Sample Type	Measurement Frequency
Biological Oxygen Demand (BOD)	Grab (mg/l)	Annual
Ammonia	Grab (mg/l)	Annual
Total Suspended Solids	Grab (mg/l)	Annual
Phosphorus	Grab (mg/l)	Annual
Fecal Coliform	Grab (#/100 ml)	Annual

Grab samples shall be collected within first 30 minutes of the discharge.

E. Reporting Requirements:

1. LTCP Implementation

The permittee shall submit an annual report by March 31 each year that describes the efforts to date on Phase II projects to include information on future planned activities.

2. Special Reporting Forms:

The permittee shall continue to record and submit monthly, CSO discharges and related data on DEP approved CSO Supplemental Report forms - Monthly Inspection Report and Detailed Outfall Report (copies attached).

3. Annual CSO Status Report:

The permittee shall submit an annual Chapter 94, "Municipal Wasteload Management Report." The report shall provide a summary of the frequency, duration, and volume of the CSOs discharges for the past calendar year, the operational status of major overflow point and an identification of known or potential instream water quality impacts and their cause. The report shall also summarize all actions to implement the approved Plan of Actions and their effectiveness, and shall evaluate and provide necessary revisions to the Plan of Actions approved by DEP. Specifically, the following information shall be included in the report:

a. Rain gauge data

Total inches (to the nearest 0.01 inch) that fell each day and month for the period of the report.

b. Inspections and maintenance

Total number of regulator inspections conducted during the period of the report (reported by the drainage system).

A list of blockages (if any) corrected or other interceptor maintenance performed, including location, date and time discovered, date and time corrected, and any discharges to the stream observed and/or suspected to have occurred.

c. Dry weather overflows

For all dry weather overflows, indicate location, date and time discovered, date and time corrected/ceased, and action(s) taken to prevent their reoccurrence.

d. Wet weather overflows

For all locations that have automatic level monitoring of the regulators, report all exceedances of the overflow level during the period of the report, including location, date, time, and duration of wet weather overflows.

e. Chronic or continuous discharges

Provide the status and corrective actions taken at all sites identified as being chronic or continuous discharges including an estimate of the flow and duration during the month covered by the report.

f. Benefit to the estuary

Provide information, with supporting data, that describes how treating flows in excess of the plants design maximum daily flow has been a benefit to the estuary.

The report shall be submitted to:

Program Manager
Clean Water Program
Department of Environmental Protection
2 East Main Street
Norristown, PA 19401

Water Protection Division
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

F. Prohibition of SSOs:

Unless otherwise authorized under PART B of this permit, any discharge from any point other than a permitted treatment plant outfall or permitted combined sewer system outfalls is prohibited. In the event there is a prohibited discharge from a sewer conveyance system, notify every such discharge to the DEP immediately and report on your monthly DMR in the remarks block. Indicate the date of discharge, volume and duration of discharge and action taken to cease the discharge.

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103 A-1	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

INTERIM

Reporting Frequency: Monthly
DMR Effective From: January 1, 2014
DMR Effective To: March 31, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Flow	SAMPLE MEASUREMENT			MGD	*****	*****	*****	*****		Continuous	Metered
	PERMIT REQUIREMENT	Report Avg Mo	Report Daily Max		*****	*****	*****				
pH	SAMPLE MEASUREMENT	*****	*****	*****		*****		S.U.		1/day	Grab
	PERMIT REQUIREMENT	*****	*****		6.0 Inst Min	*****	9.0 IMAX				
Total Residual Chlorine	SAMPLE MEASUREMENT	*****	*****	*****	*****			mg/L		1/day	Grab
	PERMIT REQUIREMENT	*****	*****		*****	0.5 Avg Mo	1.0 IMAX				
CBOD5	SAMPLE MEASUREMENT			lbs/day	*****			mg/L		1/day	24-Hr Composite
	PERMIT REQUIREMENT	7,000 Avg Mo	10,500 Wkly Avg		*****	19 Avg Mo	29 Wkly Avg				
CBOD5 Raw Sewage Influent	SAMPLE MEASUREMENT		*****	lbs/day	*****		*****	mg/L		1/day	24-Hr Composite
	PERMIT REQUIREMENT	Report Avg Mo	*****		*****	Report Avg Mo	*****				
BOD5 Raw Sewage Influent	SAMPLE MEASUREMENT		*****	lbs/day	*****		*****	mg/L		1/week	24-Hr Composite
	PERMIT REQUIREMENT	Report Avg Mo	*****		*****	Report Avg Mo	*****				
CBOD20 Percent Removal	SAMPLE MEASUREMENT	*****	*****	*****		*****	*****	%		1/week	24-Hr Composite
	PERMIT REQUIREMENT	*****	*****		89.25 Avg Mo Min % Removal	*****	*****				

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		TELEPHONE		DATE		
TYPED OR PRINTED	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa C.S. § 4904 (relating to unsworn falsification).

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103 A-1	001
PERMIT NUMBER	OUTFALL NUMBER

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		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
	SAMPLE MEASUREMENT		*****		*****	*****	*****				
CBOD20	PERMIT REQUIREMENT	10,500 Avg Mo	*****	lbs/day	*****	*****	*****	*****		1/week	24-Hr Composite
	SAMPLE MEASUREMENT				*****						
Total Suspended Solids	PERMIT REQUIREMENT	11,000 Avg Mo	16,500 Wkly Avg	lbs/day	*****	30 Avg Mo	45 Wkly Avg	mg/L		1/day	24-Hr Composite
	SAMPLE MEASUREMENT		*****		*****		*****				
Total Suspended Solids Raw Sewage Influent	PERMIT REQUIREMENT	Report Avg Mo	*****	lbs/day	*****	Report Avg Mo	*****	mg/L		1/day	24-Hr Composite
	SAMPLE MEASUREMENT	*****	*****		*****						
Total Dissolved Solids	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	Report Daily Max	mg/L		2/month	24-Hr Composite
	SAMPLE MEASUREMENT		*****		*****						
Oil and Grease	PERMIT REQUIREMENT	5,500 Avg Mo	*****	lbs/day	*****	15 Avg Mo	30 IMAX	mg/L		1/day	Grab
	SAMPLE MEASUREMENT	*****	*****		*****						
Fecal Coliform May 1 - Sep 30	PERMIT REQUIREMENT	*****	*****	*****	*****	200 Geo Mean	1,000 IMAX	CFU/ 100 ml		1/day	Grab
	SAMPLE MEASUREMENT	*****	*****		*****						
Fecal Coliform Oct 1 - Apr 30	PERMIT REQUIREMENT	*****	*****	*****	*****	200 Geo Mean	1,000 IMAX	CFU/ 100 ml		1/day	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).						
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Ammonia-Nitrogen	SAMPLE MEASUREMENT	*****	*****		*****		*****				
	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		2/month	24-Hr Composite
Nitrate as N	SAMPLE MEASUREMENT	*****	*****		*****						
	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	Report Daily Max	mg/L		2/month	24-Hr Composite
Nitrite as N	SAMPLE MEASUREMENT	*****	*****		*****						
	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	Report Daily Max	mg/L		2/month	24-Hr Composite
Total Kjeldahl Nitrogen	SAMPLE MEASUREMENT	*****	*****		*****		*****				
	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		2/month	24-Hr Composite
Total Cadmium	SAMPLE MEASUREMENT	*****	*****		*****		*****				
	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		1/month	24-Hr Composite
Total Copper	SAMPLE MEASUREMENT	*****	*****		*****		*****				
	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		1/month	24-Hr Composite
Total Cyanide	SAMPLE MEASUREMENT	*****	*****		*****		*****				
	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		1/month	24-Hr Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).		TELEPHONE		DATE		
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Total Lead	SAMPLE MEASUREMENT	*****	*****	*****	*****		*****	mg/L		1/month	24-Hr Composite
	PERMIT REQUIREMENT	*****	*****		*****	Report Avg Mo	*****				
Total Zinc	SAMPLE MEASUREMENT	*****	*****	*****	*****		*****	mg/L		1/month	24-Hr Composite
	PERMIT REQUIREMENT	*****	*****		*****	Report Avg Mo	*****				
Chlorodibromomethane	SAMPLE MEASUREMENT	*****	*****	*****	*****		*****	mg/L		1/month	Grab
	PERMIT REQUIREMENT	*****	*****		*****	Report Avg Mo	*****				
Dichlorobromomethane	SAMPLE MEASUREMENT	*****	*****	*****	*****		*****	mg/L		1/month	Grab
	PERMIT REQUIREMENT	*****	*****		*****	Report Avg Mo	*****				
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

TYPED OR PRINTED

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

FINAL

PERMITTEE NAME/ADDRESS

NAME: DELCORA STP
CLIENT: DELCORA
ADDRESS: 100 East Fifth Street
Chester, PA 19016-0999
LOCATION: Chester City
Delaware County
WATERSHED: 3-G

PA0027103 A-1	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: April 1, 2018
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Flow	SAMPLE MEASUREMENT				*****	*****	*****				
	PERMIT REQUIREMENT	Report Avg Mo	Report Daily Max	MGD	*****	*****	*****	*****		Continuous	Metered
pH	SAMPLE MEASUREMENT	*****	*****			*****					
	PERMIT REQUIREMENT	*****	*****	*****	6.0 Inst Min	*****	9.0 IMAX	S.U.		1/day	Grab
Total Residual Chlorine	SAMPLE MEASUREMENT	*****	*****		*****						
	PERMIT REQUIREMENT	*****	*****	*****	*****	0.5 Avg Mo	1.0 IMAX	mg/L		1/day	Grab
CBOD5	SAMPLE MEASUREMENT				*****						
	PERMIT REQUIREMENT	7,000 Avg Mo	10,500 Wkly Avg	lbs/day	*****	17 Avg Mo	25 Wkly Avg	mg/L		1/day	24-Hr Composite
CBOD5 Raw Sewage Influent	SAMPLE MEASUREMENT		*****		*****		*****				
	PERMIT REQUIREMENT	Report Avg Mo	*****	lbs/day	*****	Report Avg Mo	*****	mg/L		1/day	24-Hr Composite
BOD5 Raw Sewage Influent	SAMPLE MEASUREMENT		*****		*****		*****				
	PERMIT REQUIREMENT	Report Avg Mo	*****	lbs/day	*****	Report Avg Mo	*****	mg/L		1/week	24-Hr Composite
CBOD20 Percent Removal	SAMPLE MEASUREMENT	*****	*****			*****	*****				
	PERMIT REQUIREMENT	*****	*****	*****	89.25 Avg Mo Min % Removal	*****	*****	%		1/week	24-Hr Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
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TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

FINAL

PERMITTEE NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103 A-1	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: April 1, 2018
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

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PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
CBOD20	SAMPLE MEASUREMENT		*****	lbs/day	*****	*****	*****	*****		1/week	24-Hr Composite
	PERMIT REQUIREMENT	10,500 Avg Mo	*****		*****	*****	*****				
Total Suspended Solids	SAMPLE MEASUREMENT			lbs/day	*****			mg/L		1/day	24-Hr Composite
	PERMIT REQUIREMENT	12,500 Avg Mo	18,760 Wkly Avg		*****	30 Avg Mo	45 Wkly Avg				
Total Suspended Solids Raw Sewage Influent	SAMPLE MEASUREMENT		*****	lbs/day	*****		*****	mg/L		1/day	24-Hr Composite
	PERMIT REQUIREMENT	Report Avg Mo	*****		*****	Report Avg Mo	*****				
Total Dissolved Solids	SAMPLE MEASUREMENT	*****	*****	*****	*****			mg/L		2/month	24-Hr Composite
	PERMIT REQUIREMENT	*****	*****		*****	1,000 Avg Mo	2,000 Daily Max				
Oil and Grease	SAMPLE MEASUREMENT		*****	lbs/day	*****			mg/L		1/day	Grab
	PERMIT REQUIREMENT	6,250 Avg Mo	*****		*****	15 Avg Mo	30 IMAX				
Fecal Coliform Oct 1 - Apr 30	SAMPLE MEASUREMENT	*****	*****	*****	*****			CFU/ 100 ml		1/day	Grab
	PERMIT REQUIREMENT	*****	*****		*****	200 Geo Mean	1,000 IMAX				
Fecal Coliform May 1 - Sep 30	SAMPLE MEASUREMENT	*****	*****	*****	*****			CFU/ 100 ml		1/day	Grab
	PERMIT REQUIREMENT	*****	*****		*****	200 Geo Mean	1,000 IMAX				

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
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TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

FINAL

PERMITTEE NAME/ADDRESS

NAME: DELCORA STP
CLIENT: DELCORA
ADDRESS: 100 East Fifth Street
Chester, PA 19016-0999
LOCATION: Chester City
Delaware County
WATERSHED: 3-G

PA0027103 A-1	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: April 1, 2018
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
	SAMPLE MEASUREMENT		*****		*****		*****				
Ammonia-Nitrogen May 1 - Oct 31	PERMIT REQUIREMENT	9,590 Avg Mo	*****	lbs/day	*****	23 Avg Mo	*****	mg/L		2/month	24-Hr Composite
	SAMPLE MEASUREMENT		*****		*****		*****				
Ammonia-Nitrogen Nov 1 - Apr 30	PERMIT REQUIREMENT	28,770 Avg Mo	*****	lbs/day	*****	69 Avg Mo	*****	mg/L		2/month	24-Hr Composite
	SAMPLE MEASUREMENT	*****	*****		*****						
Nitrate as N	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	Report Daily Max	mg/L		2/month	24-Hr Composite
	SAMPLE MEASUREMENT	*****	*****		*****						
Nitrite as N	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	Report Daily Max	mg/L		2/month	24-Hr Composite
	SAMPLE MEASUREMENT	*****	*****		*****		*****				
Total Kjeldahl Nitrogen	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		2/month	24-Hr Composite
	SAMPLE MEASUREMENT	*****	*****		*****		*****				
Total Cadmium	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		1/month	24-Hr Composite
	SAMPLE MEASUREMENT	*****	*****		*****						
Total Copper	PERMIT REQUIREMENT	*****	*****	*****	*****	0.027 Avg Mo	0.053 Daily Max	mg/L		1/month	24-Hr Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).						
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

FINAL

PERMITTEE NAME/ADDRESS

NAME: DELCORA STP
CLIENT: DELCORA
ADDRESS: 100 East Fifth Street
Chester, PA 19016-0999
LOCATION: Chester City
Delaware County
WATERSHED: 3-G

PA0027103 A-1	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: April 1, 2018
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Total Cyanide	SAMPLE MEASUREMENT	*****	*****		*****		*****				
	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		1/month	24-Hr Composite
Total Lead	SAMPLE MEASUREMENT	*****	*****		*****		*****				
	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		1/month	24-Hr Composite
Total Zinc	SAMPLE MEASUREMENT	*****	*****		*****		*****				
	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		1/month	24-Hr Composite
Chlorodibromomethane	SAMPLE MEASUREMENT	*****	*****		*****		*****				
	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		1/month	Grab
Dichlorobromomethane	SAMPLE MEASUREMENT	*****	*****		*****		*****				
	PERMIT REQUIREMENT	*****	*****	*****	*****	Report Avg Mo	*****	mg/L		1/month	Grab
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).		TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103 A-1	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Semi-Annually
DMR Effective From: January 1, 2014
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
PCBs (Dry Weather) Jul 1 - Dec 31	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	pg/L		1/6 months	24-Hr Composite
PCBs (Dry Weather) Jan 1 - Jun 30	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	pg/L		1/6 months	24-Hr Composite
PCBs (Wet Weather) Jul 1 - Dec 31	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	pg/L		1/6 months	24-Hr Composite
PCBs (Wet Weather) Jan 1 - Jun 30	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	pg/L		1/6 months	24-Hr Composite
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S § 4904 (relating to unsworn falsification).		TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103 A-1	028
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Annually
DMR Effective From: January 1, 2014
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

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PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
pH	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****		S.U.		1/year	Grab
	PERMIT REQUIREMENT	*****	*****		*****	*****	Report Daily Max				
CBOD5	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****		mg/L		1/year	Grab
	PERMIT REQUIREMENT	*****	*****		*****	*****	Report Daily Max				
Chemical Oxygen Demand	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****		mg/L		1/year	Grab
	PERMIT REQUIREMENT	*****	*****		*****	*****	Report Daily Max				
Total Suspended Solids	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****		mg/L		1/year	Grab
	PERMIT REQUIREMENT	*****	*****		*****	*****	Report Daily Max				
Oil and Grease	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****		mg/L		1/year	Grab
	PERMIT REQUIREMENT	*****	*****		*****	*****	Report Daily Max				
Total Kjeldahl Nitrogen	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****		mg/L		1/year	Grab
	PERMIT REQUIREMENT	*****	*****		*****	*****	Report Daily Max				
Total Phosphorus	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****		mg/L		1/year	Grab
	PERMIT REQUIREMENT	*****	*****		*****	*****	Report Daily Max				

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

TYPED OR PRINTED

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SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

PRIMARY FACILITY NAME/ADDRESS

NAME	DELCORA STP
CLIENT	DELCORA
ADDRESS	100 East Fifth Street
	Chester, PA 19016-0999
LOCATION	Chester City
	Delaware County
WATERSHED	3-G

PA0027103 A-1	028
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD

YEAR	MO	DAY		YEAR	MO	DAY
			TO			

Reporting Frequency:	Annually
DMR Effective From:	January 1, 2014
DMR Effective To:	April 30, 2018
Permit Expires:	April 30, 2018
Permit Application Due:	November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Dissolved Iron	SAMPLE MEASUREMENT	*****	*****		*****	*****					
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	Report Daily Max	mg/L		1/year	Grab
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

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SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

INSTRUCTIONS FOR COMPLETING DISCHARGE MONITORING REPORTS (DMRs)

General

One or more Discharge Monitoring Reports (DMRs) are attached to your permit for reporting the results of self-monitoring activities as required by your permit. You should make copies of the DMRs for your ongoing use, unless you elect to participate in the Department of Environmental Protection's (DEP's) electronic DMR (eDMR) program (see www.dep.state.pa.us/edmr).

- Reporting frequencies will vary depending on the monitoring frequencies listed in your permit, and are generally monthly, quarterly semi-annually and annually.
- Your reports must be received by DEP on the 28th day of the month following the end of the reporting period.
- Your permit may require submission of DMRs to other agencies, including the U.S. Environmental Protection Agency (EPA).
- If you receive DMRs in the mail from EPA, please discontinue use of DMR Form No. 3800-FM-BPNPSM0462 and begin using EPA's DMRs.
- DMRs will generally include pre-populated information for permittee name and address, facility location, permit number, outfall number, permit expiration date, parameter names, and permit requirements. If you identify any errors on a DMR issued by DEP, please contact the DEP regional office that issued your permit. If you identify any errors on a DMR issued by EPA, please contact DEP's Central Office at 717-787-6744. **DO NOT make changes to DMRs issued to you.**
- You may use computer-generated replicas of Form No. 3800-FM-BPNPSM0462 or of EPA's DMR if you receive prior approval from DEP and EPA. **DEP reserves the right to instruct you to discontinue the submission of computer-generated DMRs if the permit requirements you entered on the form are inaccurate.**

Instructions

1. Enter statistical results into each blank field below the "VALUE" column headers. Results must be reported in the same units shown on the DMR.
2. Sum the total number of excursions or exceedances of permit limits across the row for each parameter and enter the value into the "NO. EX" field. For example, if the permit contains limits of 6.0 S.U. (Minimum) and 9.0 S.U. (Maximum) for pH, and the Minimum and Maximum results are 5.9 S.U. and 9.1 S.U., respectively, enter "2" into the "NO. EX" field.
3. Report the actual sampling frequency and sample type utilized during the reporting period in the fields corresponding to "Frequency of Analysis" and "Sample Type", respectively.
4. Type the name of the principal executive officer (or an authorized agent designated by a principal executive officer) who is taking responsibility for the report, sign the report (should be in ink), enter the telephone number of the responsible individual, and record the date that the report was signed. Mail only original, signed copies of DMRs.
5. In the Comments section at the bottom of the DMR, you may write a brief summary of violations in this section; however, DEP requests that all violations during the monitoring period be reported in more detail on DEP's **Non-Compliance Reporting Form** (3800-FM-BPNPSM0440) and be submitted as an attachment to the DMR. Other uses of the Comments Section include explanations of attachments to the DMR, explanations for the unavailability of data, and brief summaries of issues that have affected operations or effluent quality during the monitoring period. Always consider attaching a letter or separate document to explain your situation in more detail.

No Discharge or No Data Available

If there was no discharge at all from an outfall during the monitoring period, check the "No Discharge" box on the top of the DMR. Complete the information above and below the table and mail the DMR to the appropriate agencies. Be sure to sign and date the DMR.

If there was no discharge of a specific parameter (e.g., if a chlorine limit is in the permit but chlorine was not used for disinfection during the entire reporting period), or if data are not available for a specific parameter for the entire reporting period, do not leave the DMR blank. Instead, report one of the following No Data Indicator (NODI) codes that apply to your situation in the appropriate value field, and **provide an explanation as an attachment to the DMR**:

A Use if you are exempted from monitoring the parameter because of a General Permit condition.

E Use if all samples or results are not available for the reporting period due to equipment failure or because sample collection was overlooked or samples could not be collected for the parameter.

GG Use if your permit requires sample collection and analysis only under certain conditions and those conditions were not met during the reporting period (e.g., report chlorine results only when chlorination system is used).

FF Other: use if there is any reason for the absence of data that is not covered by those above.

If you have at least one result for a parameter, the value should be reported and not a NODI code.

Calculations

The following explains how to calculate statistical values that are commonly required by permits:

Monthly Average – For Loading (lbs/day), sum the total of daily loadings and divide by the number of samples during the month. To calculate the daily loading, multiply the daily concentration (mg/l) by the flow (MGD) on the date of sampling and a conversion factor of 8.34. For Concentration, sum the total of daily concentrations and divide by the number of samples.

Weekly Average – For Loading (lbs/day), sum the total of average daily loadings during each week of the reporting period (beginning on a Sunday and ending on a Saturday) and divide by the number of samples during the week. For Concentration, sum the total of daily concentrations each week and divide by the number of samples. Report the maximum weekly average on the DMR.

Maximum Daily ("Daily Max") – Report the maximum concentration or load measured during a 24-hour period during the reporting period; if multiple measurements are taken daily, include all data in the analysis.

Instantaneous Maximum ("IMAX") – Report the maximum result obtained by a grab sample for a specific pollutant over the entire reporting period covered by a DMR.

Instantaneous Minimum ("Minimum") – Report the minimum result obtained by a grab sample for a specific pollutant over the entire reporting period covered by a DMR.

Total Monthly Load (lbs) – Sum the total of average daily loadings, divide by the number of samples during the month, and multiply by the number of days in the month.

Geometric Mean – Report the average of a set of *n* sample results given by the *n*th root of their product. If any result is zero (0), substitute 1 for the calculation. For example, five samples were analyzed with the following results: 20, 300, 400, 500, and 0. The calculation of geometric mean is as follows (note that you will need to use the power function on a calculator):

$$\sqrt[5]{20 \cdot 300 \cdot 400 \cdot 500 \cdot 1} = \sqrt[5]{1{,}200{,}000{,}000} = (1{,}200{,}000{,}000)^{1/5} = \mathbf{65}$$

Non-Detect Data

Conventional and Toxic Parameters

For calculating average values of data sets in which there are some "detections" (results at or above the laboratory reporting limit) and some "non-detect" data (results reported below the laboratory reporting limit), use the reporting limit for non-detect data. In other words, ignore the less than (<) symbol for statistical calculations and include the < symbol with the statistical result if there is at least one non-detect result in the data set. For example, four samples were analyzed with the following results: < 1.0, 2.0, < 1.0, and 1.0. The average statistical result is < 1.3.

Where the permit includes an effluent limitation for a parameter that is less than the most sensitive detection limit available, and the laboratory reports a value at or below the lowest level specified by the permit, you may use zero (0) in the calculation in lieu of the reporting limit, if the parameter is identified in 25 Pa. Code Chapter 16, Appendix A, Tables 2A and 2B. In general, parameters with limitations that are less than the most sensitive detection limit will be identified in Part C of the permit, if applicable.

Bacteria Parameters

Report all "non-detect" (e.g., < 2) and "too numerous to count" (TNTC) (e.g., > 2,000) results on DMR supplemental forms as reported by the laboratory. Do not report "TNTC" on supplemental forms, but instead report a value qualified with the">" symbol. Where a data set includes one or more "non-detect" and/or TNTC results, calculate the geometric mean by ignoring qualifying symbols, but report the value with the symbol. If a data set includes both ">" and "<" qualifiers, the ">" qualifier takes precedence for reporting. For all "non-detect" values, specify in the Comments section of the DMR the maximum volume filtered at the laboratory.

Example 1 – For results are determined, < 2, 10, 20, and 30. The geometric mean should be reported as $< (2 \bullet 10 \bullet 20 \bullet 30)^{0.25} = < 10$. Specify the maximum volume filtered for the < 2 result in the DMR Comments.

Example 2 – Three results are determined, < 2, 1,000, and > 2,000. The geometric mean should be reported as $> (2 \bullet 1{,}000 \bullet 2{,}000^{0.333} = > 158$.

Rounding and Precision

Statistical values reported on the DMR should be rounded to the same number of decimal places as the limit for the parameter as set forth in the permit. If the permit does not contain a limit but requests monitoring only, statistical values for concentration results should be rounded to the maximum number of decimal places in the data set as reported by the laboratory or the instrument used for analysis. If mass loads must be reported and there is no limit, round statistical values to the nearest whole number, unless the calculated number is less than one, in which case the value should be rounded to one significant figure (e.g., 0.1, 0.05, etc.). If the number you are rounding is followed by 5, 6, 7, 8, or 9, round the number up, otherwise round down.

The documents "Discharge Monitoring Reports Overview and Summary" (3800-BK-DEP3047) and "Management of Non-Detect Results for Discharge Monitoring Reports" (3800-FS-DEP4262) contain more information and are incorporated by reference. These documents are available on DEP's website.

Supplemental Form Inventory

The following supplemental forms (indicated in the check box column) are attached to this permit and must be completed and submitted to DEP in accordance with the permit and the supplemental form instructions. If the eDMR system is used to submit DMR reports, the spreadsheet versions of these supplemental forms, where applicable, should be used and attached to the eDMR submissions. A link to DEP's supplemental form website is available when logging into the eDMR system.

Check Box	Supplemental Form Name and No.
☒	Daily Effluent Monitoring (3800-FM-BPNPSM0435)
☒	Influent & Process Control (3800-FM-BPNPSM0436)
☒	Hauled in Municipal Wastes (3800-FM-BPNPSM0437)
☒	Sewage Sludge/Biosolids Production and Disposal (3800-FM-BPNPSM0438)
☐	Chemical Additives Usage (3800-FM-BPNPSM0439)
☒	Non-Compliance Reporting Form (3800-FM-BPNPSM0440)
☒	CSO Monthly Summary Report (3800-FM-BPNPSM0441)
☒	CSO Detailed Report (3800-FM-BPNPSM0442)
☐	Groundwater Monitoring Data Report (3800-FM-BPNPSM0443)
☐	Nutrient Monitoring (3800-FM-BPNPSM0444)
☐	Nitrogen Budget (3800-FM-BPNPSM0445)
☐	Phosphorus Budget (3800-FM-BPNPSM0446)
☐	Annual Nutrient Summary (3800-FM-BPNPSM0447)
☐	TMDL Annual Load Summary (3800-FM-BPNPSM0448)
☐	Land Application Systems (3800-FM-BPNPSM0449)
☒	Hauled in Residual Wastes (3800-FM-BPNPSM0450)
☐	Surface Water Monitoring Data Report (3800-FM-BPNPSM0461)
☒	Lab Accreditation Form (3800-FM-BPNPSM0189)
☒	Storm Water Annual Inspection Form (3800-PM-WSFR0083v)
☒	Storm Water Additional Information (3800-PM-WSFR0083t)
☐	Other:

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
DAILY EFFLUENT MONITORING

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G
Laboratories: _____

Month: _____ Year: _____
NPDES Permit No.: PA0027103 A-1 Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	Effluent Parameters																	
	Flow		pH		TRC		CBOD5		CBOD20 % Removal		TSS		Total Dissolved Solids		Oil and Grease		Fecal Coliform	
	Q	*MGD*	Q	*S.U.*	Q	*mg/L*	Q	*mg/L*	Q	*%*	Q	*mg/L*	Q	*mg/L*	Q	*mg/L*	Q	*CFU/100 ml*
1																		
2																		
3																		
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Avg																		

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____
Title: _____ Date: _____

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
DAILY EFFLUENT MONITORING

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G
Laboratories:

Month: _____ Year: _____
NPDES Permit No.: PA0027103 A-1 Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	Effluent Parameters																	
	Ammonia		Nitrate		Nitrite		TKN		Total Cadmium		Total Copper		Total Cyanide		Total Lead		Total Zinc	
	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L
1																		
2																		
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Avg																		

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Prepared By: _____ Signature: _____
Title: _____ Date: _____

3800-FM-WSFR0435 7/2009

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SUPPLEMENTAL REPORT
DAILY EFFLUENT MONITORING

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G
Laboratories: _____

Month: _____ Year: _____
NPDES Permit No.: PA0027103 A-1 Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	Effluent Parameters																	
	Chlorodibromo-methane		Dichlorobromo-methane		PCBs (Dry Weather)		PCBs (Wet Weather)		CBOD20									
	Q	*mg/L*	Q	*mg/L*	Q	*pg/L*	Q	*pg/L*	Q	*lbs/day*	Q		Q		Q		Q	
1																		
2																		
3																		
4																		
5																		
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Avg																		

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Prepared By: _____ Signature: _____
Title: _____ Date: _____

INSTRUCTIONS FOR COMPLETING DAILY EFFLUENT MONITORING SUPPLEMENTAL REPORT

Use this form to report daily monitoring results for the parameters that must be monitored in effluent for compliance with the permit. Results for influent parameters should be reported on Form 3800-FM-WSFR0436.

1. Enter Facility Name, Municipality, County, Watershed No., Laboratories, Month, Year, NPDES Permit No., Outfall No., and Permit Expiration Date (it is noted that this information may be pre-populated if you have received this form with your permit). For Laboratories, list the names of all laboratories where samples were analyzed during the month, including on-site analysis.

2. In the column headers, below "Effluent Parameters," enter the names of parameters in the permit. Since limited space is provided, abbreviation may be necessary. If there are more parameters for an outfall than columns provided on the form, attach an additional sheet.

3. Below parameter names, and to the right of "Q" (Qualifier) column headers, enter the units associated each parameter (it is noted that this information may be pre-populated if you have received this form with your permit).

4. Enter monitoring results for parameters in the rows corresponding to the day of the month in which samples were collected. Enter results exactly as reported by the laboratory, or if measured with on-site equipment, to the level of precision recommended by the equipment manufacturer. Enter data qualifiers such as "<," ">," "J," and others in the "Q" column.

5. Calculate and report average values at the bottom of the table in accordance with the DMR Instructions (3800-FM-WSFR0463). Note – for bacteria, calculate and report the geometric mean value.

6. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0436 Rev. 8/2011

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BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT – INFLUENT & PROCESS CONTROL

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103 A-1
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	Influent					Process Control				
	Flow (MGD)	BOD5 (mg/l)	BOD5 (lbs)	TSS (mg/l)	TSS (lbs)	Aeration MLSS (mg/l)	Aeration DO (mg/l)	Sludge Wasted (gallons)		
1										
2										
3										
4										
5										
6										
7										
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Avg										
Max										

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

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INSTRUCTIONS FOR COMPLETING INFLUENT & PROCESS CONTROL SUPPLEMENTAL REPORT

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. For **Influent**, enter daily average Influent Flow (MGD) (if an influent flow meter is in use), daily influent BOD_5 or BOD_5 concentrations (mg/l) and loads (lbs), and daily influent TSS concentrations (mg/l) and loads (lbs). Calculate loads by multiplying daily average flow (MGD) by daily average concentration (mg/l) and a conversion factor of 8.34. If an influent flow meter is not in use, you may use results from an effluent flow meter.

3. For **Process Control**, enter daily average Mixed Liquor Suspended Solids (MLSS) (mg/l) and daily average Aeration Dissolved Oxygen (DO) for aerobic biological treatment systems, and total daily Sludge Wasted (removed from biological treatment), in gallons, for all treatment system types. If a parameter does not apply to your facility, leave the column blank. Information for other parameters such as Return Activated Sludge (RAS) Rate, Recirculation Rate (for fixed media treatment systems), Sludge Blanket Thickness, Sludge Volume Index, and others may be requested by the DEP office that issued the permit.

4. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0437 8/2009

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT – HAULED IN MUNICIPAL WASTES

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103 A-1
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	SEPTAGE				SLUDGE				OTHER (specify):				DAILY TOTALS	
	Gallons	BOD_5 (mg/l)	BOD_5 (lbs)	Disposal Location	Gallons	BOD_5 (mg/l)	BOD_5 (lbs)	Disposal Location	Gallons	BOD_5 (mg/l)	BOD_5 (lbs)	Disposal Location	Gallons	BOD_5 (lbs)
1														
2														
3														
4														
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6														
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27														
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31														
Avg												Monthly Totals:		

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

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INSTRUCTIONS FOR COMPLETING HAULED IN MUNICIPAL WASTES SUPPLEMENTAL REPORT

This form is intended for documenting the receipt of municipal wastes including sewage sludge, septage and other wastewaters hauled in from other facilities for processing and/or disposal at your facility. This form should not be used for reporting receipt of residual wastes (e.g., food processing wastes, oil and gas wastewater, landfill leachate, etc.) - please use Form 3800-FM-WSFR0450 for reporting this information.

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. For septage, sludge and other wastewaters (specify type in the space provided), record the daily volume received in gallons, the daily BOD_5 concentration (average), the daily BOD_5 load in lbs (average), and the disposal location. For disposal location, specify the plant location or tank receiving hauled in wastes (e.g., headworks, primarily clarifier, digester, etc.).

3. Determine daily BOD_5 concentrations in mg/l by sampling loads in accordance with the permit or otherwise as determined by the facility. Periodic sampling of loads is encouraged to improve confidence in reported results.

4. Calculate the average, daily total and monthly total values and report the values in the spaces provided.

5. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0438 Rev. 7/2010

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BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
SEWAGE SLUDGE / BIOSOLIDS PRODUCTION AND DISPOSAL

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103 A-1
Renewal application due **180 days** prior to expiration
This permit will expire on _____

SEWAGE SLUDGE/BIOSOLIDS PRODUCTION INFORMATION (Identify each off-site removal event and incineration event)

☐ Check here if there were no off-site removal events during the month

Date	Liquid Sewage Sludge/Biosolids Hauled Off-site			Dewatered Sewage Sludge/Biosolids Hauled Off-site			Sewage Sludge/Biosolids Dewatered and Incinerated On-site		
	Gallons	% Solids	Dry Tons	Tons Dewatered	% Solids	Dry Tons	Tons Dewatered	% Solids	Dry Tons
		TOTAL:			TOTAL:			TOTAL:	

SEWAGE SLUDGE/BIOSOLIDS AND INCINERATOR ASH DISPOSAL AND BENEFICIAL USE INFORMATION
(Identify all sites where sewage sludge/biosolids or ash were disposed or land applied)

Site Name				
Municipality				
County				
DEP Permit No.				
Type of Material*				
Dry Tons Applied/Disposed				
Type of Disposal/Use*				
Hauler Name				

*See Instructions for explanation

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

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INSTRUCTIONS FOR COMPLETING SEWAGE SLUDGE / BIOSOLIDS SUPPLEMENTAL REPORT

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

Biosolids Production Information

2. For each off-site removal event for liquid sewage sludge or biosolids and for dewatered sewage sludge or biosolids, and for each event where dewatered sewage sludge or biosolids are incinerated on-site, list the date of the event, identify the gallons (liquid) or tons (dewatered) removed or incinerated and the percent solids (e.g., 10%, 20%, etc.) Report only sewage sludge or biosolids that have been removed from the plant digesters and other solids which have been **permanently** removed from the treatment process. Do **not** include sewage sludge or biosolids from other facilities that are processed at your facility. (If there were no off-site removal events during the month, check the box above the table).

   Calculate dry tons for liquid sewage sludge or biosolids by multiplying the volume (gallons) by the percent solids and by a conversion factor of 0.0000417. For example, if 2,500 gallons of liquid biosolids is removed, and the percent solids is 3.0%, dry tons is calculated as:

   2,500 gallons x 3.0% x 0.0000417 = 0.31 dry tons

   Calculate dry tons for dewatered sewage sludge or biosolids by multiplying the tons dewatered by the percent solids and by a conversion factor of 0.01. For example, if 5 tons of dewatered biosolids is removed, and the percent solids is 50%, dry tons is calculated as:

   5 tons x 50% x 0.01 = 2.5 dry tons

   The **% Solids** of liquid or dewatered sewage sludge or biosolids must be determined periodically through laboratory testing. Do not estimate or guess this value. An acceptable test method is method 2540B in *Standard Methods for the Examination of Water and Wastewater*, 18th edition, where samples are dried at 103-105°C. Other references such as ASTM may have equivalent tests which are also acceptable.

Biosolids and Incinerator Ash Disposal and Beneficial Use Information

3. Report sewage sludge, biosolids, and ash disposal and beneficial use information by disposal/application site. There are columns for four possible sites per month - if more sites are needed, attach additional pages. For each Site Name, listed at the top of the column, enter the Municipality and County of the site, the DEP Permit No. (i.e., Biosolids permit number for land application, landfill waste management permit number, etc.), Type of Material (sewage sludge, biosolids, or incinerator ash), Dry Tons Applied/Disposed at the site for the month, Type of Disposal/Use (e.g., reed beds, agricultural utilization, composting, landfill, other treatment plant, etc.) and the name of the hauler (company or individual name).

4. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0440 Rev. 7/2010

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

NON-COMPLIANCE REPORTING FORM

Use this supplemental form to report all permit violations and any other non-compliance that may endanger health or the environment, in accordance with your permit. Complete all sections that apply. If you are reporting violations of permit limits, monitoring requirements or schedules that do not pose an immediate threat to health or the environment, you may attach this form to the Discharge Monitoring Report (DMR). **Title 25, Pa. Code §§ 91.33 and 91.34 (regarding incidents causing or threatening pollution and activities utilizing pollutants, respectively), in part requires immediate notification by telephone to the Department of pollution incidents, remediation, and may require an additional report on the incident or plan of pollution prevention measures.** If you are reporting other non-compliance events, and the reporting deadline does not coincide with your submission of the DMR, it should be submitted separately to the Department by the reporting deadline set forth in the permit. See instructions for more information.

Facility Name: DELCORA STP Month: _____ Year: _____

Municipality: City of Chester County: Delaware Permit No.: PA0027103 A-1

☐ **Violations of Permit Effluent Limitations***

Date	Parameter	Permit Limit	Units	Statistical Code	Result	Units	Cause of Violation	Corrective Action Taken

☐ **Sanitary Sewer Overflows and Other Unauthorized Discharges***

Event Date	Substance Discharged	Location	Volume (gals)	Duration (hrs)	Receiving Waters	Impact on Waters	Cause of Discharge	Date DEP Notified

☐ **Other Permit Violations***

- ☐ Sample collection less frequent than required — Explain _____
- ☐ Sample type not in compliance with permit — Explain _____
- ☐ Violation of permit schedule — Explain _____
- ☐ Other — Explain _____
- ☐ Other — Explain _____

*** If the space provided is not sufficient to record all information, please attach additional sheets.**

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

INSTRUCTIONS FOR COMPLETING NON-COMPLIANCE REPORTING FORM

Use this supplemental form to report all permit violations and any other non-compliance that may endanger health or the environment, in accordance with your permit. Complete all sections that apply. If you are reporting violations of permit limits, monitoring requirements or schedules that do not pose an immediate threat to health or the environment, you may attach this form to the Discharge Monitoring Report (DMR). If you are reporting other non-compliance events, and the deadline for a written report (e.g., 5 days) does not coincide with your submission of the DMR, this form should be submitted separately to the Department by the reporting deadline set forth in the permit.

If you are unsure of whether an incident constitutes non-compliance that may endanger health or the environment, it is recommended that you notify the Department verbally as soon as possible after you become aware of the incident. Title 25, Pa. Code §§ 91.33 and 91.34 (regarding incidents causing or threatening pollution and activities utilizing pollutants, respectively), in part requires immediate notification by telephone to the Department of pollution incidents, remediation, and may require an additional report on the incident or plan of pollution prevention measures.

Instructions:

1. Enter the name of the facility, the municipality and county where it is located, the month and year when violations occurred, and the NPDES or WQM permit number for the facility.

2. If there were violations of permit effluent limitations during the month, check the box next to "Violations of Permit Effluent Limitations." (Note – if using the electronic version of this form, check the boxes first, and then select Tools – Unprotect Document to enter additional information). Enter the date of the violation (if a violation of a minimum or maximum limit, the date of sample collection, or if a violation of an average limit, the end of the monitoring period), the parameter name, the permit limit and units, the statistical code (e.g., "MIN", "MAX", "MO AVG", etc.), the measured result and units, the cause of the violation and the corrective action taken. **If there are more than two violations during the monitoring period and/or if the space provided is insufficient to explain the cause or corrective action, please attach additional pages.**

3. If there are Sanitary Sewer Overflow (SSO) discharges or other unauthorized discharges from the facility (e.g., spills, leaks, etc.) that enter or have the potential to enter waters of the Commonwealth, including groundwater, notify DEP by phone as soon as possible, and document the discharge on this form by checking the box next to "Sanitary Sewer Overflows and Other Unauthorized Discharges." Record the event (discharge) date, the substance discharged (e.g., sewage, on-site chemicals, etc.), the location where the discharge occurred (e.g., manhole number, pump station name, equipment description, etc.), the volume discharged (gallons), the approximate duration of the discharge (hours), the receiving waters (name of stream or groundwater), the impact on the receiving waters, if observed (e.g., solids deposition, foam, fish kill, etc.), the cause of the discharge, and the date on which the Department was verbally notified. **If there are more than two discharge events during the monitoring period and/or if the space provided is insufficient to explain the discharge, please attach additional pages.**

4. If there are other violations of the permit, check the box next to "Other Permit Violations," and check the appropriate box that describes the violation type. If not identified on the form, check the box next to "Other" and provide a written explanation. **If the space provided is insufficient to explain the violation, please attach additional pages.**

5. Type your name and title and sign and date the form after reading the certification statement.

If you have questions about completing this form, contact the Water Management Operations Section of the Department in your region:

Southeast Region – (484) 250-5970
Northeast Region – (570) 826-2553
Southcentral Region – (717) 705-4707
Northcentral Region – (570) 327-3661
Southwest Region – (412) 442-4000
Northwest Region – (814) 332-6942

3800-FM-WSFR0441 7/2009

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103 A-1
Renewal application due **180 days** prior to expiration
This permit will expire on _____

CSO Outfall No.	Outfall Location*	Discharge?*	Comments

*See instructions for explanation.

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

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INSTRUCTIONS FOR COMPLETING CSO MONTHLY INSPECTION SUPPLEMENTAL REPORT

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. List all CSO outfalls associated with the facility, as listed in the NPDES permit, in the column labeled "CSO Outfall No.," using additional sheets as needed.

3. Specify the location of the CSO (e.g., street or other identification information) in the column labeled "Outfall Location."

4. In the column labeled "Discharge?" enter "Yes" or "No" for each outfall to report whether a discharge was identified at any time during the calendar month. **If you respond Yes for any outfall, a separate "Detailed Outfall Report" must be submitted for that outfall**.

5. Add any additional outfall-specific information as needed in the "Comments" column.

6. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0442 7/2009

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

CSO SUPPLEMENTAL REPORT
DETAILED OUTFALL REPORT

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103 A-1 Outfall No. _____
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	Identification*	Discharge Volume (MG)*	Duration (hrs)	Cause*	Precipitation (in)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for Knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

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BUREAU OF WATER STANDARDS AND FACILITY REGULATION

INSTRUCTIONS FOR COMPLETING CSO DETAILED OUTFALL SUPPLEMENTAL REPORT

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., CSO Outfall No., and Permit Expiration Date.

2. Explain how the discharge was identified (e.g., inspection, complaint, alarm) in the column labeled "Identification."

3. In the column labeled "Discharge Volume," specify the volume of the discharge in million gallons, and (in parentheses) identify the method used to determine the volume by selecting one of the following codes:

   O = Observed duration and rate of flow to approximate overflow volume.
   C = Calculated overflow volume utilizing a model or empirical analysis.
   M = Measured overflow volume from data collected by a calibrated flow monitor.
   U = Unable to determine.

4. In the column labeled "Duration (hrs)," specify the total discharge period. If you estimate the discharge period, explain how you arrived at the estimate in the Comments column.

5. In the column labeled "Cause," identify the cause of the overflow (e.g., line or gate blockage, malfunction, hydraulic load).

6. In the column labeled "Precipitation," report the total precipitation for the day, in inches (in), as measured using an on-site rain gauge, or use local airport data.

7. Add any additional outfall-specific information as needed in the "Comments" column.

8. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0450 1/2010

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BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
HAULED IN RESIDUAL WASTES

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: ______ Year: ______
NPDES Permit No.: PA0027103 A-1
Renewal application due **180 days** prior to expiration
This permit will expire on ______

Date	Volume Received *(gallons)*	License Plate No.	Well Permit No.	Source of Residual Waste			Wastewater Type	Chemical Analysis *(Yes/No)*
				Generator	*Address*	*State*		
Total:								

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: ______ Signature: ______
Title: ______ Date: ______

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
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INSTRUCTIONS FOR COMPLETING HAULED IN RESIDUAL WASTES SUPPLEMENTAL REPORT

Use this form to document receipt of residual wastes at your treatment facility (e.g., food processing waste, landfill leachate, oil and gas wastewaters). Municipal wastes such as sewage sludge and septage should be documented on the Hauled in Municipal Wastes Supplemental Report (3800-FM-WSFR0437).

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. Enter the date for each day in which the facility receives residual wastes. If wastewater is received from more than one generator on the same day, repeat the date in a separate row.

3. Report the total volume received each day from each generator (source), in whole gallons.

4. Report the license plate number of the vehicle hauling the wastewater to the treatment facility. If more than one vehicle is used by a generator, report the date and total volume hauled by each vehicle daily (use separate rows as necessary).

5. For oil and gas wastewaters, enter the permit number of the well from which the wastewater was generated. For other wastewaters, this column may remain blank.

6. Report the source of each load of residual waste, including the generator name, address, and state. For oil and gas wastewaters, report the location of the well(s) generating the wastewater.

7. Enter Wastewater Type, typically frac water, drilling fluids or production water for oil and gas wastewaters, or other types such as food processing waste or leachate.

8. If the wastewater has been analyzed and reported on a Residual Waste Form 26R, or a separate waste characterization using the parameters from Form 26R, enter "Yes" under the column "Chemical Analysis", otherwise enter "No".

9. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0189 3/2009

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SUPPLEMENTAL LABORATORY ACCREDITATION FORM[1]

Permittee Name: DELCORA

Address: 100 East Fifth Street
Chester, PA 19016-0999

PERMIT NUMBER	MONITORING PERIOD Year/Month/Day						
PA0027103 A-1				TO			

PARAMETER	ANALYSIS METHOD	LAB NAME	LAB ID NUMBER[2]

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibly of fine and imprisonment for knowing violations.

Name/Title Principal Executive Officer **Phone:** _____ **Signature of Principal Executive Officer or Authorized Agent**

_____ **Date:** _____ _____

[1] Submit this form with the first Discharge Monitoring Report (DMR), Annual Report or Recordkeeping and Reporting Form, where sample results are submitted to the Department for compliance purposes. You do not need to send this form to the Department again UNLESS there has been a change to the lab or method of analysis.

[2] For parameter(s) covered under accreditation-by-rule, submit the lab's registration number in lieu of an accreditation number.

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BUREAU OF WATER STANDARDS AND FACILITY REGULATION

ANNUAL INSPECTION FORM FOR NPDES PERMITS FOR DISCHARGES OF STORMWATER ASSOCIATED WITH INDUSTRIAL ACTIVITIES

1. Date of Inspection _____

3. NPDES Permit # PA0027103 A-1

2. Facility Owner/Operator Name and Address:
DELCORA
100 E 5th Street, PO Box 999
Chester, PA 19013-4508
Tel: (610) 876-5523 Fax: _____

4. Facility Address and Location
Street 3201 W Front Street, Chester, PA 19013-2320
Municipality City of Chester County Delaware

VISUAL INSPECTION

Provide the following information for the storm event

5. Duration _____

6. Estimation of rainfall (in inches) † _____

† The annual inspection should be conducted after a storm event that is greater than 0.1 inches in magnitude and that occurred at least 72 hours from the previous 0.1 inch storm event.

7. Estimate the time between the previous rain event _____

8. Estimate the total volume (in gallons) for each outfall and report it in item 9.
Volume = C x I A,
where C is the runoff coefficient (i.e, 0.9 for paved and 0.5 for unpaved)
I is the rainfall amount (in ft), and
A is the area (square feet) drained to the outfall inspected
(convert from cubic feet to gallons by multiplying by 7.481).

9. Estimate the size of the drainage area (in square feet) for each outfall.

Outfall #	Drainage Area	% Paved	% Unpaved	Volume in gallons

Complete the following information for each outfall inspected (items 10 through 15)

VISUAL INSPECTION OF OUTFALL NUMBER

10. Description of area(s) that drains to outfall. _____

11. Description of stormwater management practices, erosion and sedimentation control practices, and other structural control measures that are in place to control pollutants from running off-site.

12. Is there visible flow from the pipe? ☐ Yes ☐ No (Go to number 14) Pipe Dia. (inches) _____
    a. ODOR: Chemical Musty Sewage Rotten Eggs Other _____
    b. COLOR: Clear Red Yellow Brown Other _____
    c. CLARITY: Clear Cloudy Opaque Suspended Solids Other _____
    d. FLOATABLES: Suds Oily Film Garbage Sewage Other _____
    e. DEPOSITS/STAINS: None Oily Sediment Other _____
    f. VEGETATION: None Normal Excessive Inhibited Other _____

13. Is there standing water present? ☐ Yes ☐ No (Go to number 16)
    a. ODOR: Chemical Musty Sewage Rotten Eggs Other _____
    b. COLOR: Clear Red Yellow Brown Other _____
    c. CLARITY: Clear Cloudy Opaque Suspended Solids Other _____
    d. FLOATABLES: Suds Oily Film Garbage Sewage Other _____
    e. DEPOSITS/STAINS: None Oily Sediment Other _____
    f. VEGETATION: None Normal Excessive Inhibited Other _____

14. Is there any evidence of or potential for any pollutant being discharged at this outfall? ☐ Yes ☐ No
    Describe:

    If yes, identify substances present in the sediment (if possible).

15. Description of corrective measures taken or planned to remove sediments or debris if found during inspection. Please provide a schedule if actions are planned.

COMPREHENSIVE SITE COMPLIANCE EVALUATION

16. Do drainage maps reflect current conditions? ☐ Yes ☐ No

If no, provide your comments.
Comments: _____

17. Based on review of PPC Plan (including Housekeeping Measures), are any changes, corrections or updates necessary? ☐ Yes ☐ No

If yes, provide your comments.
Comments: _____

18. Have you inspected all structural stormwater controls used to implement the PPC Plan to determine if they are adequate? ☐ Yes ☐ No

If no, provide your comments.
Comments: _____

19. Have you inspected the entire site to determine if erosion and sedimentation control measures are adequate? ☐ Yes ☐ No

If no, provide your comments.
Comments: _____

20. Summarize corrective actions/measures completed or planned to correct any deficiencies found as a result of the inspection. Please provide a schedule if actions are planned.

_____

21. Signature of Inspector

Name of Inspector: _____

Date Report Prepared: _____

Signature of Inspector: _____

22. Signature of Owner/Operator of Facility

_____ _____ _____

Name/Title Principal Executive Officer Signature Date

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 Pa. C.S. §4904 (relating to unsworn falsification).

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

ANNUAL INSPECTION FORM FOR NPDES PERMITS FOR DISCHARGES OF STORMWATER ASSOCIATED WITH INDUSTRIAL ACTIVITIES

Who May Use This Form

This form is to be used by all PAG-03 permit holders to comply with the (1) annual inspection requirement in Section A.2.b.(1) concerning Appendix J facilities, and (2) Comprehensive Site Compliance Evaluation and Record Keeping requirement in Section C.3.c. of the General Permit. This form may also be used for facilities with individual NPDES permits.

Completing the Form

One form must be completed for each facility or site. Please address all applicable questions and provide documentation to support the responses.

Permittees required to comply with Appendix J of the General Permit are eligible to conduct an Annual Inspection in lieu of monitoring. The Annual Inspection shall include visual inspection of all outfalls and a Comprehensive Site Compliance Evaluation. Complete items 10 through 15 for each outfall inspected. Where possible, visual inspection shall identify substances present in the sediment. The Annual Inspection/Certification must identify area(s) contributing pollutant(s) to stormwater discharge(s) and evaluate whether measures to reduce pollutant loadings identified in the PPC Plan are adequate and properly implemented in accordance with terms of the General Permit or whether additional control measures are necessary. Any deficiencies found during the inspection are to be corrected promptly in accordance with Part C.3.c.(2) of the General Permit.

Permittees that need to comply with requirements other than Appendix J of the General Permit must use this form to comply with Comprehensive Site Evaluation and Recordkeeping requirement of the General Permit.

Where to File This Form

When an annual inspection is conducted in lieu of monitoring, the permittee shall submit a completed and signed Annual Inspection Form, postmarked no later than 28 days after completion of the inspection to the appropriate DEP regional office. All other permittees shall retain the completed and signed form as part of the PPC Plan.

3800-PM-WSFR0083t Rev. 11/2010
Additional Information

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ADDITIONAL INFORMATION FOR THE REPORTING OF STORM WATER DISCHARGE MONITORING

(This form must be completed and submitted with the DMR form for <u>each</u> outfall sampled)

A. PERMITTEE'S NAME	OUTFALL/DISCHARGE NO.
DELCORA	

FACILITY/LOCATION

DELCORA STP, Chester City, Delaware County

B. SAMPLED STORM EVENT

Provide the date of storm event:	Provide the duration (in hours) of storm event:
Estimate rainfall measurements (in inches) of the storm which generated the sample runoff:	Estimate the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch) storm event:

Drainage area and volume of runoff:

(1) Paved area _____ square feet x 0.9 (estimated runoff coefficient) x rainfall _____ inches x 0.6234 = _____ gallons
(2) Unpaved area _____ square feet x 0.5 (estimated runoff coefficient) x rainfall _____ inches x 0.6234 = _____ gallons

Total area _____ square feet Total volume of discharge _____ gallons

C. GRAB SAMPLE METHODOLOGY

If a grab sample during the first 30 minutes of the discharge was impracticable, and the sample was instead taken during the first hour of the discharge, describe the circumstances:

D. SAMPLE WAIVER

If samples could not be collected due to adverse climactic conditions, describe why samples could not be collected. Attach available documentation of the event.

If monitoring data submitted is being used to represent other substantially identical outfalls, summarize on a separate sheet the drainage area and volume of runoff under item B. above for each outfall.

Whole Effluent Toxicity Report
NPDES Permit No. PA0027103 A-1

Permittee Name: DELCORA
Municipality: City of Chester
County: Delaware

Species Name End Points:	Ceriodaphnia dubia (Cladoceran) Survival	Ceriodaphnia dubia (Cladoceran) Reproduction	Pimephales promelas (fathead minnow) Survival	Pimephales promelas (fathead minnow) Growth
NOEC (%)				
TUc				
IC_{25}				
PMSD				
TUa				
LC_{50} (48-hour)				
LC_{50} (96-hour)				

Delaware Valley Early Warning System

Updated December 2012

EWS Hotline at 1-866-844-0850

Overview

The Delaware Valley Early Warning System (EWS) is an integrated monitoring, notification, and communication system designed to provide advance warning of surface water contamination events in the Schuylkill and lower Delaware River watersheds. The Philadelphia Water Department (PWD) began development of the EWS in 2002 with funding provided by the Pennsylvania Department of Environmental Protection (PADEP) and the United States Environmental Protection Agency (USEPA). The EWS was deployed as a fully functional system in 2004. The system covers the entire Schuylkill River watershed as well as the lower Delaware River Basin from Wilmington, DE, to the Delaware Water Gap, near Dingman's Ferry, PA.

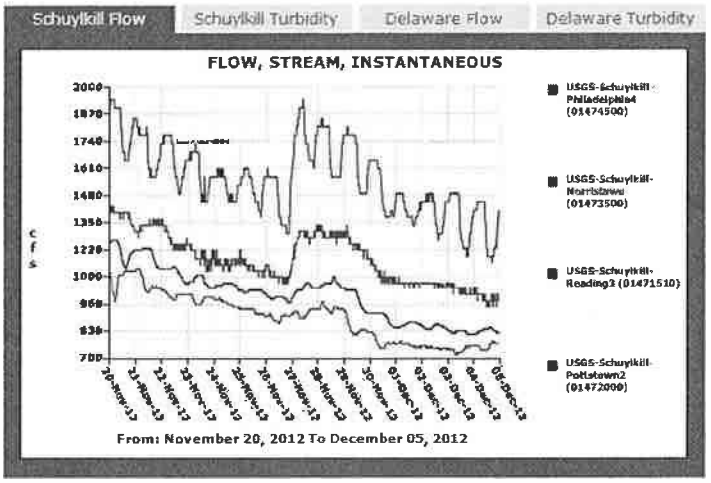
Key Components

□ ***Partnership***: The EWS Partnership brings together key stakeholders and includes representatives from both public and private drinking water supply and treatment facilities in the coverage area, industries who withdraw water from the Schuylkill and Delaware Rivers for daily operations, and representatives of government agencies.

□ ***Notification System***: The notification system is the means by which water suppliers and industries are made aware of a contamination event. This system, which was developed to support existing notification protocols, relies upon an emergency responder, water supplier, discharger, or other like party to initiate an alert. Events are reported to the EWS members using either the automated telephone notification system or web-based notification system.

□ ***Monitoring Network***: The EWS monitoring network includes on-line water quality and flow monitoring stations, drawing on USGS sites and monitors at water treatment plant intakes throughout both watersheds.

Real-Time Flow and Turbidity Charts for the last 15 days



□ ***Website and Database Portal***: The website and database portal constitute the backbone of the EWS. The website is fully integrated with the notification system and monitoring network, and includes a Spill Model Analysis Tool that allows users to simulate and track spills for spill response planning purposes.

The EWS notification and event recording features provide valuable decision support information to PWD and system subscribers. Ongoing upgrades and enhancements continue to be made to ensure that the Delaware Valley EWS continues to serve as the most advanced system possible, helping to protect the drinking water supplies for over 3 million people in the Schuylkill and lower Delaware River watersheds.

For more information on the EWS, please contact:

Kelly Anderson
Source Water Protection Program Manager
Philadelphia Water Department
(215) 685.6245
Kelly.Anderson@phila.gov

Alison Aminto
EWS Project Engineer
Philadelphia Water Department
(215) 685.6315
Alison.Aminto@phila.gov

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July 18, 2017

Admin
Orig: ~~B Willert~~

REC JUL 24 2017

BY: 2017-0795

CERTIFIED MAIL NO. 7015 3010 0001 5161 5374

Mr. Robert J. Willert
Executive Director
DELCORA
100 East Fifth Street, P. O. Box 999
Chester, PA 19016-0999

Re: Final NPDES Permit- Sewage
DELCORA STP
NPDES Permit No. PA0027103 A-2
Authorization ID No. 1179435
Chester City, Delaware County

Dear Mr. Willert:

Your NPDES permit amendment is enclosed. Please read the permit carefully. The permit expires on the date identified on page 1 of the permit. A renewal application must be submitted to this office 180 days prior to the permit expiration date, if a discharge is expected to continue past the expiration date of the permit.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717.787.3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800.654.5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717.787.3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717.787.3483) FOR MORE INFORMATION.

If you have any questions, please contact Sara Reji Abraham at 484.250.5195.

Sincerely,

Jenifer L. Fields, P.E.
Environmental Program Manager
Clean Water Program

Enclosures

cc: City of Chester (w/o enclosure)
Chester Environmental Partnership (w/o enclosure)
Mr. Kovach-DRBC
Mr. Magge-Majors File
Operations Section
U.S. Environmental Protection Agency
Central Office, Division of Operations, Monitoring and Data Systems
Re

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE REQUIREMENTS FOR PUBLICLY OWNED TREATMENT WORKS (POTWs)

NPDES PERMIT NO: PA0027103
Amendment No. 2

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 *et seq.* ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 *et seq.*,

Delaware County Regional Water Quality Control Authority (DELCORA)
100 East Fifth Street, P O Box 999
Chester, PA 19016-0999

is authorized to discharge from a facility known as **DELCORA STP**, located at **3201 West Front Street, City of Chester, Delaware County**, to the **Delaware River Estuary Zone 4** in Watershed(s) **3-G** in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts A, B and C hereof.

THIS PERMIT SHALL BECOME EFFECTIVE ON August 1, 2017

THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON April 30, 2018

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.

2. Failure to comply with the terms, conditions or effluent limitations of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (40 CFR 122.41(a))

3. A complete application for renewal of this permit, or notice of intent to cease discharging by the expiration date, must be submitted to DEP at least 180 days prior to the above expiration date (unless permission has been granted by DEP for submission at a later date), using the appropriate NPDES permit application form. (40 CFR 122.41(b), 122.21(d))

   In the event that a timely and complete application for renewal has been submitted and DEP is unable, through no fault of the permittee, to reissue the permit before the above expiration date, the terms and conditions of this permit, including submission of the Discharge Monitoring Reports (DMRs), will be automatically continued and will remain fully effective and enforceable against the discharger until DEP takes final action on the pending permit application. (25 Pa. Code 92a.7(b), (c))

4. This NPDES permit does not constitute authorization to construct or make modifications to wastewater treatment facilities necessary to meet the terms and conditions of this permit.

DATE PERMIT ISSUED April 2, 2013

ISSUED BY

Jenifer L. Fields, P.E.
Clean Water Program Manager
Southeast Regional Office

DATE PERMIT AMENDMENT ISSUED July 18, 2017

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. A. **For Outfall** 001 , **Latitude** 39° 49' 25.00" , **Longitude** 75° 23' 22.00" , **River Mile Index** 80.71 , **Stream Code** 0002

Discharging to Delaware River Estuary Zone 4

which receives wastewater from DELCORA STP

1. The permittee is authorized to discharge during the period from Permit Effective Date through Completion of plant expansion.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements, Footnotes and Supplemental Information).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.5	XXX	1.0	1/day	Grab
CBOD5	7,000	10,500	XXX	19	29 Wkly Avg	38	1/day	24-Hr Composite
CBOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/day	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
CBOD20	10,500	XXX	XXX	XXX	XXX	XXX	1/week	24-Hr Composite
CBOD20 (%) Percent Removal	XXX	XXX	89.25 Min Mo Avg	XXX	XXX	XXX	1/week	24-Hr Composite
Total Suspended Solids	11,000	16,500	XXX	30	45 Wkly Avg	60	1/day	24-Hr Composite
Total Suspended Solids Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/day	24-Hr Composite
Total Dissolved Solids	XXX	XXX	XXX	Report	Report	Report	2/month	24-Hr Composite
Oil and Grease	5,500	XXX	XXX	15	XXX	30	1/day	Grab

Outfall 001, Continued (from Permit Effective Date through Completion of plant expansion)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	1/day	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000*	1/day	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Nitrate as N	XXX	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Nitrite as N	XXX	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Total Kjeldahl Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Total Cadmium	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Copper	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Cyanide	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Lead	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Zinc	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite

Outfall 001 , Continued (from Permit Effective Date through Completion of plant expansion)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Chlorodibromomethane	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
Dichlorobromomethane	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
PCBs (Dry Weather) (pg/L)** Jan 1 - Jun 30	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PCBs (Dry Weather) (pg/L)** Jul 1 - Dec 31	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PCBs (Wet Weather) (pg/L)** Jan 1 - Jun 30	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PCBs (Wet Weather) (pg/L)** Jul 1 - Dec 31	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 001. *See Other Requirement No. R. **See Other Requirement No. S .

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. B. For Outfall 001 , **Latitude** 39° 49' 21.00" , **Longitude** 75° 23' 18.00" , **River Mile Index** 80.71 , **Stream Code** 0002

Discharging to Delaware River Estuary Zone 4

which receives wastewater from DELCORA STP

1. The permittee is authorized to discharge during the period from Completion of plant expansion*** through Permit Expiration Date.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements, Footnotes and Supplemental Information).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.5	XXX	1.0	1/day	Grab
CBOD5	7,000	10,500	XXX	17	25 Wkly Avg	34	1/day	24-Hr Composite
CBOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/day	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
CBOD20	10,500	XXX	XXX	XXX	XXX	XXX	1/week	24-Hr Composite
CBOD20 (%) Percent Removal	XXX	XXX	89.25 Min Mo Avg	XXX	XXX	XXX	1/week	24-Hr Composite
Total Suspended Solids	12,500	18,760	XXX	30	45 Wkly Avg	60	1/day	24-Hr Composite
Total Suspended Solids Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/day	24-Hr Composite
Total Dissolved Solids	XXX	XXX	XXX	1,000	2,000	2500	2/month	24-Hr Composite
Oil and Grease	6,250	XXX	XXX	15	XXX	30	1/day	Grab

Outfall 001, Continued (from Completion of plant expansion through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	1/day	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000*	1/day	Grab
Ammonia-Nitrogen May 1 - Oct 31	9,590	XXX	XXX	23	XXX	46	2/month	24-Hr Composite
Ammonia-Nitrogen Nov 1 - Apr 30	28,770	XXX	XXX	69	XXX	138	2/month	24-Hr Composite
Nitrate as N	XXX	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Nitrite as N	XXX	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Total Kjeldahl Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Total Cadmium	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Copper	XXX	XXX	XXX	0.027	0.053	0.066	1/month	24-Hr Composite
Total Cyanide	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Lead	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite

Outfall 001, Continued (from Completion of plant expansion through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Zinc	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Chlorodibromomethane	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
Dichlorobromomethane	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
PCBs (Dry Weather) (pg/L)** Jan 1 - Jun 30	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PCBs (Dry Weather) (pg/L)** Jul 1 - Dec 31	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PCBs (Wet Weather) (pg/L)** Jan 1 - Jun 30	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PCBs (Wet Weather) (pg/L)** Jul 1 - Dec 31	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 001. *See Other Requirement No. R. ** See Other Requirement No. S. *** See the Other Requirement No. O.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. C. **For Outfall** 028 , **Latitude** 39° 49' 30.00" , **Longitude** 75° 23' 45.00" , **River Mile Index** 80.71 , **Stream Code** 0002

Discharging to Delaware River Estuary Zone 4

which receives wastewater from the area around the primary treatment units and the parking area around the administrative buildings (B-2 and B-5) at DELCORA STP

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements, Footnotes and Supplemental Information).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly		Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
CBOD5	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Chemical Oxygen Demand	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Kjeldahl Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 028 (inlet near the maintenance building). Also See Part C Condition No. IV

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. D. **For Outfall** 029 , **Latitude** 39° 49' 30.00" , **Longitude** 75° 23' 30.00" , **River Mile Index** 80.71 , **Stream Code** 0002

Discharging to Delaware River Estuary Zone 4

which receives stormwater from the areas of the primary treatment units, sludge storage and processing, truck unloading, and waste storage areas at DELCORA STP

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 029 not monitored. Also See Part C Condition No.IV for annual inspection and additional requirements.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. E. **For Outfall** 030 , **Latitude** 39° 49' 30.00" , **Longitude** 75° 23' 45.00" , **River Mile Index** 80.71 , **Stream Code** 0002

Discharging to Delaware River Estuary Zone 4

which receives stormwater from the areas around the secondary treatment units at DELCORA STP

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 030 not monitored. Also See Part C Condition No.IV for annual inspection and additional requirements.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. F. For Outfall 031 , **Latitude** 39° 49' 30.00" , **Longitude** 75° 23' 30.00" , **River Mile Index** 80.71 , **Stream Code** 0002

Discharging to Delaware River Estuary Zone 4

which receives stormwater from the areas of the secondary treatment units and former ash lagoon at DELCORA STP

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 031 not monitored. Also See Part C Condition No.IV for annual inspection and additional requirements.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

Outfalls	Interceptor/Regulator Locations	Latitudes	Longitudes	Name of Receiving Streams
002	Front and Booth	39°49'30"	-75°23'31"	Delaware River
003	Front and Highland	39°49'34"	-75°23'11"	Delaware River
004	Front and Hayes	39°50'36"	-75°23'07"	Delaware River
005	Front and Townsend	39°49'46"	-75°22'53"	Delaware River
007	Delaware and Reaney	39°49'51"	-75°22'45"	Delaware River
008	2nd and Tilghman	39°50'05"	-75°22'22"	Delaware River
009	2nd and Lloyd	39°50'14"	-75°22'10"	Delaware River
010	5th and Pusey	39°50'26"	-75°22'19"	Delaware River
011	2nd and Parker	39°50'26"	-75°21'54"	Delaware River
013	2nd and Welsh	39°50'37"	-75°21'17"	Delaware River
014	3rd and Upland	39°50'50"	-75°21'05"	Delaware River
032	2nd and Avenue of The States	39°50'34"	-75°21'25"	Delaware River
012	2nd and Edgmont	39°50'42"	-75°21'38"	Chester Creek
019	14th and Crozer Hospital	39°51'24"	75°21'54"	Chester Creek
020	Kerlin and Finland	39°51'24"	-75°22'27"	Chester Creek
021	9th and Sproul	39°51'08"	-75°21'49"	Chester Creek
022	6th and Sproul	39°50'56"	-75°21'47"	Chester Creek
023	3rd and Edgmont	39°50'45"	-75°21'42"	Chester Creek
024	3rd and Dock	39°50'44"	-75°21'43"	Chester Creek
025	5th and Penn	39°50'49"	-75°21'50"	Chester Creek
026	7th and Penn	39°50'58"	-75°21'55"	Chester Creek
015	4th and Melrose	39°51'03"	-75°20'48"	Ridley Creek
016	8th and McDowell	39°51'15"	-75°20'53"	Ridley Creek
017	9th and Campbell	39°51'16"	-75°20'51"	Ridley Creek
018	Sun Drive and Hancock Street	39°51'47"	-75°20'57"	Ridley Creek
033	Elkington Boulevard and Ridley Creek	39°52'22"	-75°22'29"	Ridley Creek

which receives wastewater from combined sewer overflow system

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements, Footnotes and Supplemental Information).

These CSO outfalls are subject to terms and conditions as specified in Part C. Condition No.V. There shall be no discharge during dry weather.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS (Continued)

Additional Requirements

1. The permittee may not discharge:

   a. Floating solids, scum, sheen or substances that result in observed deposits in the receiving water. (25 Pa Code 92a.41(c))

   b. Oil and grease in amounts that cause a film or sheen upon or discoloration of the waters of this Commonwealth or adjoining shoreline, or that exceed 15 mg/l as a daily average or 30 mg/l at any time (or lesser amounts if specified in this permit). (25 Pa. Code 92a.47(a)(7) and 95.2(2))

   c. Substances in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life. (25 Pa Code 93.6(a))

   d. Foam or substances that produce an observed change in the color, taste, odor or turbidity of the receiving water, unless those conditions are otherwise controlled through effluent limitations or other requirements in this permit. (25 Pa Code 92a.41(c))

2. The monthly average percent removal of BOD_5 or $CBOD_5$ and TSS must be at least 85% for POTW facilities on a concentration basis except where 25 Pa. Code 92a.47(g) and (h) are applicable to facilities with combined sewer overflows (CSOs) or as otherwise specified in this permit. (25 Pa. Code 92a.47(a)(3))

3. If the permit requires the reporting of average weekly statistical results, the maximum weekly average concentration and maximum weekly average mass loading shall be reported, regardless of whether the results are obtained for the same or different weeks.

4. The permittee shall monitor the sewage effluent discharge(s) for the effluent parameters identified in the Part A limitations table(s) during all bypass events at the facility, using the sample types that are specified in the limitations table(s). Where the required sample type is "composite", the permittee must commence sample collection within one hour of the start of the bypass, wherever possible. The results shall be reported on the Daily Effluent Monitoring supplemental form (3800-FM-BPNPSM0435) and be incorporated into the calculations used to report self-monitoring data on Discharge Monitoring Reports (DMRs).

Footnotes

(1) When sampling to determine compliance with mass effluent limitations, the discharge flow at the time of sampling must be measured and recorded.

(2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events.

Supplemental Information

(1) If the permit requires reporting of average weekly limitations use the following guideline. If the "maximum average concentration" and the "maximum average mass loading" does not occur within the same week, both the highest weekly average concentration and the highest weekly average mass load should be reported, regardless of whether they both occur during the same calendar week.

(2) The hydraulic design capacity of 50 million gallons per day for the treatment facility is used to prepare the annual Municipal Wasteload Management Report to help determine whether a "hydraulic overload" situation exists, as defined in Title 25 Pa. Code Chapter 94.

(3) The effluent limitations for Outfall 001 were determined using an effluent discharge rate of 44 million gallons per day before the completion of plant expansion.

(4) The effluent limitations for Outfall 001 were determined using an effluent discharge rate of 50 million gallons per day after the completion of plant expansion.

II. DEFINITIONS

At Outfall (XXX) means a sampling location in outfall line XXX below the last point at which wastes are added to outfall line (XXX), or where otherwise specified.

Average refers to the use of an arithmetic mean, unless otherwise specified in this permit. (40 CFR 122.41(l)(4)(iii))

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollution to surface waters of the Commonwealth. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (25 Pa. Code 92a.2)

Bypass means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i))

Calendar Week is defined as the seven consecutive days from Sunday through Saturday, unless the permittee has been given permission by DEP to provide weekly data as Monday through Friday based on showing excellent performance of the facility and a history of compliance. In cases when the week falls in two separate months, the month with the most days in that week shall be the month for reporting.

Clean Water Act means the Federal Water Pollution Control Act, as amended (33 U.S.C.A. §§1251 to 1387).

Composite Sample (for all except GC/MS volatile organic analysis) means a combination of individual samples (at least eight for a 24-hour period or four for an 8-hour period) of at least 100 milliliters (mL) each obtained at spaced time intervals during the compositing period. The composite must be flow-proportional; either the volume of each individual sample is proportional to discharge flow rates, or the sampling interval is proportional to the flow rates over the time period used to produce the composite. (EPA Form 2C)

Composite Sample (for GC/MS volatile organic analysis) consists of at least four aliquots or grab samples collected during the sampling event (not necessarily flow proportioned). The samples must be combined in the laboratory immediately before analysis and then one analysis is performed. (EPA Form 2C)

Daily Average Temperature means the average of all temperature measurements made, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar day or during the operating day if flows are of a shorter duration.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day. (25 Pa. Code 92a.2, 40 CFR 122.2)

Daily Maximum Discharge Limitation means the highest allowable "daily discharge."

Discharge Monitoring Report (DMR) means the DEP or EPA supplied form(s) for the reporting of self-monitoring results by the permittee. (25 Pa. Code 92a.2 and 40 CFR 122.2)

Estimated Flow means any method of liquid volume measurement based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters and batch discharge volumes.

Geometric Mean means the average of a set of n sample results given by the n^{th} root of their product.

Grab Sample means an individual sample of at least 100 mL collected at a randomly selected time over a period not to exceed 15 minutes. (EPA Form 2C)

Hauled-In Wastes means any waste that is introduced into a treatment facility through any method other than a direct connection to the sewage collection system. The term includes wastes transported to and disposed of within the treatment facility or other entry points within the collection system.

Hazardous Substance means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act. (40 CFR 122.2)

Immersion Stabilization (i-s) means a calibrated device is immersed in the wastewater until the reading is stabilized.

Indirect Discharger means a non-domestic discharger introducing pollutants to a Publicly Owned Treatment Works (POTW) or other treatment works. (25 Pa. Code 92a.2 and 40 CFR 122.2)

Industrial User means a source of Indirect Discharge. (40 CFR 403.3)

Instantaneous Maximum Effluent Limitation means the highest allowable discharge of a concentration or mass of a substance at any one time as measured by a grab sample. (25 Pa. Code 92a.2)

Measured Flow means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

Monthly Average Discharge Limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. (25 Pa. Code 92a.2)

Municipality means a city, town, borough, county, township, school district, institution, authority or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes. (25 Pa. Code 92a.2)

Publicly Owned Treatment Works (POTW) means a treatment works as defined by §212 of the Clean Water Act, owned by a state or municipality. The term includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. The term also includes sewers, pipes or other conveyances if they convey wastewater to a POTW providing treatment. The term also means the municipality as defined in section 502(4) of the Clean Water Act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works. (25 Pa Code 92a.2 and 40 CFR 122.2)

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR 122.41(m)(1)(ii))

Stormwater means the runoff from precipitation, snow melt runoff, and surface runoff and drainage. (25 Pa. Code 92a.2)

Stormwater Associated With Industrial Activity means the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant, and as defined at 40 CFR §122.26(b)(14)(i) – (ix) and (xi) and 25 Pa. Code 92a.2.

Toxic Pollutant means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains may, on the basis of information available to DEP cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in these organisms or their offspring. (25 Pa. Code 92a.2)

Weekly Average Discharge Limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

III. SELF-MONITORING, REPORTING AND RECORDKEEPING

A. Representative Sampling

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity (40 CFR 122.41(j)(1)). Representative sampling includes the collection of samples, where possible, during periods of adverse weather, changes in treatment plant performance and changes in treatment plant loading. If possible, effluent samples must be collected where the effluent is well mixed near the center of the discharge conveyance and at the approximate mid-depth point, where the turbulence is at a maximum and the settlement of solids is minimized. (40 CFR 122.48 and 25 Pa. Code § 92a.61)

2. Records Retention (40 CFR 122.41(j)(2))

   Except for records of monitoring information required by this permit related to the permittee's sludge use and disposal activities which shall be retained for a period of at least 5 years, all records of monitoring activities and results (including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records), copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained by the permittee for 3 years from the date of the sample measurement, report or application, unless a longer retention period is required by the permit. The 3-year period shall be extended as requested by DEP or the EPA Regional Administrator.

3. Recording of Results (40 CFR 122.41(j)(3))

   For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

   a. The exact place, date and time of sampling or measurements.
   b. The person(s) who performed the sampling or measurements.
   c. The date(s) the analyses were performed.
   d. The person(s) who performed the analyses.
   e. The analytical techniques or methods used; and the associated detection level.
   f. The results of such analyses.

4. Test Procedures (40 CFR 122.41(j)(4))

   Facilities that test or analyze environmental samples used to demonstrate compliance with this permit shall be in compliance with laboratory accreditation requirements of Act 90 of 2002 (27 Pa. C.S. §§4101-4113) and 25 Pa. Code Chapter 252, relating to environmental laboratory accreditation. Unless otherwise specified in this permit, the test procedures for the analysis of pollutants shall be those approved under 40 CFR Part 136 (or in the case of sludge use or disposal, approved under 40 CFR Part 136, unless otherwise specified in 40 CFR Part 503 or Subpart J of 25 Pa. Code Chapter 271), or alternate test procedures approved pursuant to those parts, unless other test procedures have been specified in this permit.

5. Quality/Assurance/Control

   In an effort to assure accurate self-monitoring analyses results:

   a. The permittee, or its designated laboratory, shall participate in the periodic scheduled quality assurance inspections conducted by DEP and EPA. (40 CFR 122.41(e), 122.41(i)(3))

   b. The permittee, or its designated laboratory, shall develop and implement a program to assure the quality and accurateness of the analyses performed to satisfy the requirements of this permit, in accordance with 40 CFR Part 136. (40 CFR 122.41(j)(4))

B. Reporting of Monitoring Results

1. The permittee shall effectively monitor the operation and efficiency of all wastewater treatment and control facilities, and the quantity and quality of the discharge(s) as specified in this permit. (40 CFR 122.41(e), 122.44(i)(1))

2. Discharge Monitoring Reports (DMRs) must be completed in accordance with DEP's published DMR Instructions (3800-BPNPSM-0463). DMRs are based on calendar reporting periods. DMR(s) must be received by the agency(ies) specified in paragraph 3 below in accordance with the following schedule:

   - Monthly DMRs must be received within 28 days following the end of each calendar month.

   - Quarterly DMRs must be received within 28 days following the end of each calendar quarter, i.e., January 28, April 28, July 28, and October 28.

   - Semiannual DMRs must be received within 28 days following the end of each calendar semiannual period, i.e., January 28 and July 28.

   - Annual DMRs must be received by January 28, unless Part C of this permit requires otherwise.

3. The permittee shall complete all Supplemental Reporting forms (Supplemental DMRs) provided by DEP in this permit (or an approved equivalent), and submit the signed, completed forms as an attachment to the DMR(s). If the permittee elects to use DEP's electronic DMR (eDMR) system, one electronic submission may be made for DMRs and Supplemental DMRs. If paper forms are used, the completed forms shall be mailed to:

   Department of Environmental Protection
   Clean Water Program
   2 East Main Street
   Norristown, PA 19401

   NPDES Enforcement Branch (3WP42)
   Office of Permits & Enforcement
   Water Protection Division
   U.S. EPA - Region III
   1650 Arch Street
   Philadelphia, PA 19103-2029

4. If the permittee elects to begin using DEP's eDMR system to submit DMRs required by the permit, the permittee shall, to assure continuity of business operations, continue using the eDMR system to submit all DMRs and Supplemental Reports required by the permit, unless the following steps are completed to discontinue use of eDMR:

   a. The permittee shall submit written notification to the regional office that issued the permit that it intends to discontinue use of eDMR. The notification shall be signed by a principal executive officer or authorized agent of the permittee.

   b. The permittee shall continue using eDMR until the permittee receives written notification from DEP's Central Office that the facility has been removed from the eDMR system, and electronic report submissions are no longer expected.

5. The completed DMR Form shall be signed and certified by either of the following applicable persons, as defined in 25 Pa. Code 92a.22:

   - For a corporation - by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
   - For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.

- For a municipality, state, federal or other public agency - by a principal executive officer or ranking elected official.

If signed by a person other than the above, written notification of delegation of DMR signatory authority must be submitted to DEP in advance of or along with the relevant DMR form. (40 CFR 122.22(b))

6. If the permittee monitors any pollutant at monitoring points as designated by this permit, using analytical methods described in Part A III.A.4. herein, more frequently than the permit requires, the results of this monitoring shall be incorporated, as appropriate, into the calculations used to report self-monitoring data on the DMR. (40 CFR 122.41(l)(4)(ii))

C. Reporting and Notification Requirements

1. Planned Changes to Physical Facilities – The permittee shall give notice to DEP as soon as possible but no later than 30 days prior to planned physical alterations or additions to the permitted facility. A permit under 25 Pa. Code Chapter 91 may be required for these situations prior to implementing the planned changes. A permit application, or other written submission to DEP, can be used to satisfy the notification requirements of this section.

Notice is required when:

a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b). (40 CFR 122.41(l)(1)(i))

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in this permit. (40 CFR 122.41(l)(1)(ii))

c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR 122.41(l)(1)(iii))

d. The planned change may result in noncompliance with permit requirements. (40 CFR 122.41(l)(2))

e. The facility is proposing an expansion or modifications to its treatment processes.

2. Planned Changes to Waste Stream – Under the authority of 25 Pa. Code 92a.24(a) and 40 CFR 122.42(b), the permittee shall provide notice to DEP and EPA as soon as possible but no later than 45 days prior to any planned changes in the volume or pollutant concentration of its influent waste stream as a result of indirect discharges or hauled-in wastes, as specified in paragraphs 2.a. and 2.b., below. Notice shall be provided on the "Planned Changes to Waste Stream" Supplemental Report (3800-FM-BPNPSM0482), available on DEP's website. The permittee shall provide information on the quality and quantity of waste introduced into the POTW, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW (40 CFR 122.42(b)(3)). The Report shall be sent via Certified Mail or other means to confirm DEP's receipt of the notification. DEP will determine if the submission of an application and receipt of an amended permit is required.

a. Introduction of New Pollutants (25 Pa. Code 92a.24(a), 40 CFR 122.42(b)(1))

New pollutants are defined as parameters that meet one or more of the following criteria:

(i) Were not detected in the facility's influent waste stream as reported in the permit application; and were not otherwise analyzed in the influent and reported to DEP prior to permit issuance; and have not been previously approved to be included in the permittee's influent waste stream by DEP and/or EPA in writing; and would be detectable in the facility's influent waste stream using the most sensitive testing method, as a result of the addition of the planned change;

(ii) Are previously unapproved pollutants introduced into the POTW from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants (40 CFR 122.42(b)(1)).

The permittee shall provide notification of the introduction of new pollutants in accordance with paragraph 2 above. The permittee may not authorize the introduction of new pollutants until the permittee receives DEP's and/or EPA's written approval.

b. Increased Loading of Approved Pollutants (25 Pa. Code 92a.24(a), 40 CFR 122.42(b)(2))

Approved pollutants are defined as parameters that meet one or more of the following criteria:

(i) Were detected in the facility's influent waste stream as reported in the permittee's permit application; or were otherwise analyzed in the influent and reported to DEP prior to permit issuance; or have been previously approved to be included in the permittee's influent waste stream by DEP and/or EPA in writing;

(ii) Have an effluent limitation or monitoring requirement in this permit.

The permittee shall provide notification of the introduction of increased influent loading (lbs/day) of approved pollutants in accordance with paragraph 2 above when (1) the cumulative increase in influent loading (lbs/day) exceeds 20% of the maximum loading reported in the permit application, or a loading previously approved by DEP and/or EPA, or (2) may cause an exceedance in the effluent of Effluent Limitation Guidelines (ELGs) or limitations in Part A of this permit, or (3) may cause interference or pass through at the POTW, or (4) may cause exceedances of the applicable water quality standards in the receiving stream. Unless specified otherwise in this permit, if DEP and/or EPA does not respond to the notification within 30 days of its receipt, the permittee may proceed with the increase in loading. The acceptance of increased loading of approved pollutants may not result in an exceedance of ELGs or effluent limitations, may not result in a hydraulic or organic overload condition as defined in 25 Pa. Code 94.1, and may not cause exceedances of the applicable water quality standards in the receiving stream.

3. Reporting Requirements for Hauled-In Wastes

a. Receipt of Residual Waste

(i) The permittee shall document the receipt of all hauled-in residual wastes (including but not limited to wastewater from oil and gas wells, food processing waste, and landfill leachate) received for processing at the treatment facility. The permittee shall report hauled-in residual wastes on a monthly basis to DEP on the "Hauled In Residual Wastes" Supplemental Report (3800-FM-BPNPSM0450) as an attachment to the DMR. If no residual wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report. The information used to develop the Report shall be retained by the permittee for five years from the date of receipt and must be made available to DEP or EPA upon request.

(1) The dates that residual wastes were received.

(2) The volume (gallons) of wastes received.

(3) The license plate number of the vehicle transporting the waste to the treatment facility.

(4) The permit number(s) of the well(s) where residual wastes were generated, if applicable.

(5) The name and address of the generator of the residual wastes.

(6) The type of wastewater.

(7) Documentation of whether or not a chemical analysis of the residual wastes were reported on a Residual Waste Form 26R, or a separate waste characterization using the parameters from Form 26R.

The transporter of residual waste must maintain these and other records as part of the daily operational record (25 Pa. Code 299.219). If the transporter is unable to provide this information, the residual wastes shall not be accepted by the permittee until such time as the transporter is able to provide the required information.

(ii) The following conditions apply to the characterization of residual wastes received by the permitted treatment facility:

(1) The permitted facility must receive and maintain on file a characterization of the residual wastes it receives from the generator, as required by 25 Pa. Code 287.54. The characterization shall conform to the Bureau of Waste Management's Form 26R except as noted in paragraph (2), below. Each load of residual waste received must be characterized accordingly.

(2) For wastewater generated from hydraulic fracturing operations ("frac wastewater") within the first 30 production days of a well site, the characterization may be a general frac wastewater characterization approved by DEP. Thereafter, the characterization must be waste-specific and reported on the Form 26R.

b. Receipt of Municipal Waste

(i) The permittee shall document the receipt of all hauled-in municipal wastes (including but not limited to septage and liquid sewage sludge) received for processing at the treatment facility. The permittee shall report hauled-in municipal wastes on a monthly basis to DEP on the "Hauled In Municipal Wastes" Supplemental Report (3800-FM-BPNPSM0437) as an attachment to the DMR. If no municipal wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report:

(1) The dates that municipal wastes were received.

(2) The volume (gallons) of wastes received.

(3) The BOD_5 concentration (mg/l) and load (lbs) for the wastes received.

(4) The location(s) where wastes were disposed of within the treatment facility.

(ii) Sampling and analysis of hauled-in municipal wastes must be completed to characterize the organic strength of the wastes, unless composite sampling of influent wastewater is performed at a location downstream of the point of entry for the wastes. The influent BOD_5 characterization for the treatment facility, as reported in the annual Municipal Wasteload Management Report per 25 Pa. Code Chapter 94, must be representative of the hauled-in municipal wastes received.

4. Unanticipated Noncompliance or Potential Pollution Reporting

a. Immediate Reporting - The permittee shall immediately report any incident causing or threatening pollution in accordance with the requirements of 25 Pa. Code Sections 91.33 and 92a.41(b).

(i) If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify DEP by telephone of the location and nature of the danger. Oral notification to the Department is required as soon as possible, but no later than 4 hours after the permittee becomes aware of the incident causing or threatening pollution.

(ii) If reasonably possible to do so, the permittee shall immediately notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger.

(iii) The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.

b. The permittee shall report any noncompliance which may endanger health or the environment in accordance with the requirements of 40 CFR 122.41(l)(6). These requirements include the following obligations:

(i) 24 Hour Reporting - The permittee shall orally report any noncompliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported within 24 hours under this paragraph (40 CFR 122.41(l)(6)(ii)):

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit;

(2) Any upset which exceeds any effluent limitation in the permit; and

(3) Violation of the maximum daily discharge limitation for any of the pollutants listed in the permit as being subject to the 24-hour reporting requirement.

(ii) Written Report - A written submission shall also be provided within 5 days of the time the permittee becomes aware of any noncompliance which may endanger health or the environment. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(iii) Waiver of Written Report - DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by DEP, the permittee shall submit a written report in accordance with this paragraph. (40 CFR 122.41(l)(6)(iii))

5. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraph C.4 of this section or specific requirements of compliance schedules, at the time DMRs are submitted, on the Non-Compliance Reporting Form (3800-FM-BPNPSM0440). The reports shall contain the information listed in paragraph C.4.b.(ii) of this section. (40 CFR 122.41(l)(7))

PART B

I. MANAGEMENT REQUIREMENTS

A. Compliance Schedules (25 Pa. Code 92a.51, 40 CFR 122.47(a))

1. The permittee shall achieve compliance with the terms and conditions of this permit within the time frames specified in this permit.

2. The permittee shall submit reports of compliance or noncompliance, or progress reports as applicable, for any interim and final requirements contained in this permit. Such reports shall be submitted no later than 14 days following the applicable schedule date or compliance deadline. (40 CFR 122.47(a)(4))

B. Permit Modification, Termination, or Revocation and Reissuance

1. This permit may be modified, terminated, or revoked and reissued during its term in accordance with 25 Pa. Code 92a.72 and 40 CFR 122.41(f).

2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. (40 CFR 122.41(f))

3. In the absence of DEP action to modify or revoke and reissue this permit, the permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time specified in the regulations that establish those standards or prohibitions. (40 CFR 122.41(a)(1))

C. Duty to Provide Information

1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. (40 CFR 122.41(h))

2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this permit. (40 CFR 122.41(h))

3. Other Information - Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to DEP, it shall promptly submit the correct and complete facts or information. (40 CFR 122.41(l)(8))

4. The permittee shall provide the following information in the annual Municipal Wasteload Management Report, required under the provisions of Title 25 Pa. Code Chapter 94:

   a. The requirements identified in 25 Pa. Code 94.12.

   b. The identity of any indirect discharger(s) served by the POTW which are subject to pretreatment standards adopted under Section 307(b) of the Clean Water Act; the POTW shall also specify the total volume of discharge and estimate concentration of each pollutant discharged into the POTW by the indirect discharger.

   c. A "Solids Management Inventory" including the following information for the preceding year, at a minimum: average annual flow (MGD), average influent BOD_5 (mg/l), average effluent $CBOD_5$ (mg/l), total volume of sludge wasted (gallons), average solids concentration of return or waste sludge flow (mg/l), and total sludge or biosolids generated (wet or dry tons).

   d. The total volume of hauled-in residual and municipal wastes received during the year, by source.

e. The Annual Report requirements for permittees required to implement an industrial pretreatment program listed in Part C, as applicable.

D. General Pretreatment Requirements

1. POTWs shall require indirect dischargers to the treatment works subject to pretreatment standards adopted under Section 307(b) of the Clean Water Act to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act and regulations thereunder.

2. Any POTW (or combination of POTWs operated by the same authority) with a total design flow greater than 5 million gallons per day (MGD) and receiving from industrial users pollutants which pass through or interfere with the operation of the POTW or are otherwise subject to Pretreatment Standards will be required to establish a POTW Pretreatment Program unless specifically exempted by the Approval Authority. A POTW with a design flow of 5 MGD or less may be required to develop a POTW Pretreatment Program if the Approval Authority finds that the nature or volume of the industrial influent, treatment process upsets, violations of effluent limitations, contamination of sludge, or other circumstances warrant in order to prevent interference or pass through. (40 CFR 403.8)

3. Each POTW with an approved Pretreatment Program pursuant to 40 CFR 403.8 shall develop and enforce specific limits to implement the prohibitions listed in 40 CFR 403.5(a)(1) and (b), and shall continue to develop these limits as necessary and effectively enforce such limits. This condition applies, for example, when there are planned changes to the waste stream as identified in Part A III.C.2. If the permittee is required to develop or continue implementation of a Pretreatment Program, detailed requirements will be contained in Part C of this permit.

4. For all POTWs, where pollutants contributed by indirect dischargers result in interference or pass through, and a violation is likely to recur, the permittee shall develop and enforce specific limits for indirect dischargers and other users, as appropriate, that together with appropriate facility or operational changes, are necessary to ensure renewed or continued compliance with this permit or sludge use or disposal practices. Where POTWs do not have an approved Pretreatment Program, the permittee shall submit a copy of such limits to DEP when developed. (25 Pa. Code 92a.47(d))

E. Proper Operation and Maintenance

1. The permittee shall employ operators certified in compliance with the Water and Wastewater Systems Operators Certification Act (63 P.S. §§1001-1015.1).

2. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, adequate laboratory controls including appropriate quality assurance procedures. This provision also includes the operation of backup or auxiliary facilities or similar systems that are installed by the permittee, only when necessary to achieve compliance with the terms and conditions of this permit. (40 CFR 122.41(e))

F. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge, sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR 122.41(d))

G. Bypassing

1. Bypassing Not Exceeding Permit Limitations - The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions in paragraphs two, three and four of this section. (40 CFR 122.41(m)(2))

2. Other Bypassing - In all other situations, bypassing is prohibited and DEP may take enforcement action against the permittee for bypass unless:

   a. A bypass is unavoidable to prevent loss of life, personal injury or "severe property damage." (40 CFR 122.41(m)(4)(i)(A))

   b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance. (40 CFR 122.41(m)(4)(i)(B))

   c. The permittee submitted the necessary notice required in paragraph G.4 below. (40 CFR 122.41(m) (4)(i)(C))

3. DEP may approve an anticipated bypass, after considering its adverse effects, if DEP determines that it will meet the conditions listed in paragraph G.2 above. (40 CFR 122.41(m)(4)(ii))

4. Notice

   a. Anticipated Bypass – If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the bypass. (40 CFR 122.41(m)(3)(i))

   b. Unanticipated Bypass

      (i) The permittee shall submit immediate notice of an unanticipated bypass causing or threatening pollution. The notice shall be in accordance with Part A III.C.4.a.

      (ii) The permittee shall submit oral notice of any other unanticipated bypass within 24 hours, regardless of whether the bypass may endanger health or the environment or whether the bypass exceeds effluent limitations. The notice shall be in accordance with Part A III.C.4.b.

H. Sanitary Sewer Overflows (SSOs)

An SSO is an overflow of wastewater, or other untreated discharge from a separate sanitary sewer system (which is not a combined sewer system), which results from a flow in excess of the carrying capacity of the system or from some other cause prior to reaching the headworks of the sewage treatment facility. SSOs are not authorized under this permit. The permittee shall immediately report any SSO to DEP in accordance with Part A III.C.4 of this permit.

II. PENALTIES AND LIABILITY

A. Violations of Permit Conditions

Any person violating Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative and/or criminal penalties as set forth in 40 CFR §122.4l(a)(2).

Any person or municipality, who violates any provision of this permit; any rule, regulation or order of DEP; or any condition or limitation of any permit issued pursuant to the Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603 and 605 of the Clean Streams Law.

B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or

- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or noncompliance)

Shall, upon conviction, be punished by a fine and/or imprisonment as set forth in *18 Pa.C.S.A § 4904* and 40 CFR §122.41(j)(5) and (k)(2).

C. Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance pursuant to Section 309 of the Clean Water Act or Sections 602, 603 or 605 of the Clean Streams Law.

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under the Clean Water Act and the Clean Streams Law.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. 40 CFR 122.41(c)

III. OTHER RESPONSIBILITIES

A. Right of Entry

Pursuant to Sections 5(b) and 305 of Pennsylvania's Clean Streams Law, and Title 25 Pa. Code Chapter 92a and 40 CFR §122.41(i), the permittee shall allow authorized representatives of DEP and EPA, upon the presentation of credentials and other documents as may be required by law:

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; (40 CFR 122.41(i)(1))

2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; (40 CFR 122.41(i)(2))

3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and (40 CFR 122.41(i)(3))

4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Clean Streams Law, any substances or parameters at any location. (40 CFR 122.41(i)(4))

B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph 2 of this section, a permit may be transferred by the permittee to a new owner or operator only if this permit has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (40 CFR 122.61(a))

2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:

   a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; (40 CFR 122.61(b)(1))

b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; and (40 CFR 122.61(b)(2))

c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue this permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section. (40 CFR 122.61(b)(3))

d. The new permittee is in compliance with existing DEP issued permits, regulations, orders and schedules of compliance, or has demonstrated that any noncompliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedules set forth in the permit), consistent with 25 Pa. Code 92a.51 (relating to schedules of compliance) and other appropriate Department regulations. (25 Pa. Code 92a.71)

3. In the event DEP does not approve transfer of this permit, the new owner or controller must submit a new permit application.

C. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege. (40 CFR 122.41(g))

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit. (40 CFR 122.41(b))

E. Other Laws

The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations.

IV. ANNUAL FEE

Permittees shall pay an annual fee in accordance with 25 Pa. Code § 92a.62. Annual fee amounts are specified in the following schedule and are due on each anniversary of the effective date of the most recent new or reissued permit. All flows identified in the schedule are annual average design flows. (25 Pa. Code 92a.62)

Small Flow Treatment Facility (SRSTP and SFTF)	$0
Minor Sewage Facility < 0.05 MGD (million gallons per day)	$250
Minor Sewage Facility ≥ 0.05 and < 1 MGD	$500
Minor Sewage Facility with CSO (Combined Sewer Overflow)	$750
Major Sewage Facility ≥ 1 and < 5 MGD	$1,250
Major Sewage Facility ≥ 5 MGD	$2,500
Major Sewage Facility with CSO	$5,000

As of the effective date of this permit, the facility covered by the permit is classified in the following fee category: **Major Sewage Facility with CSO**.

Invoices for annual fees will be mailed to permittees approximately three months prior to the due date. In the event that an invoice is not received, the permittee is nonetheless responsible for payment. Throughout a five year permit term, permittees will pay four annual fees followed by a permit renewal application fee in the last year of permit coverage. Permittees may contact the DEP at 717-787-6744 with questions related to annual fees. The fees identified above are subject to change in accordance with 25 Pa. Code 92a.62(e).

Payment for annual fees shall be remitted to DEP at the address below by the anniversary date. Checks should be made payable to the Commonwealth of Pennsylvania.

PA Department of Environmental Protection
Bureau of Point and Non-Point Source Management
Re: Chapter 92a Annual Fee
P.O. Box 8466
Harrisburg, PA 17105-8466

PART C

I. OTHER REQUIREMENTS

A. Notification of the designation of the responsible operator must be submitted to the permitting agency by the permittee within 60 days after the effective date of the permit and from time to time thereafter as the operator is replaced.

B. For reporting purposes on the DMR, the term "average weekly" shall mean the highest average weekly value observed during the monthly monitoring period.

C. If, at any time, the DEP determines that the discharge permitted herein creates a public nuisance or causes environmental harm to the receiving water of the Commonwealth, the DEP may require the permittee to adopt such remedial measures as will produce a satisfactory effluent. If the permittee fails to adopt such remedial measures within the time specified by the DEP, the right to discharge herein granted shall, upon notice by the DEP, cease and become null and void.

D. The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance, and replacement of all sewers or sewerage structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.

E. The CBOD20 in the raw wastewater shall be reduced by at least 89¼ percent as a monthly average in accordance with the requirements of the Delaware River Basin Commission for Zone 4 of the Delaware Estuary. This requirement is not applicable for those days during wet weather events, when average daily flow rate exceeds 66 mgd.

The percent removal shall be calculated from the weekly 24-hour composite samples of the influent and effluent. The influent samples must reflect true characteristics of the raw wastewater and must not be affected by plant recycle flows.

F. Analysis for the following pollutant(s) shall be performed using the following test method(s) contained in 40 C.F.R. Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants, or any approved test method(s) of equal or greater sensitivity:

Parameter	Test Method
Lead, Total	200.7 (ICP/AES)
Cadmium, Total	200.8 (ICP/MS)
Copper, Total	200.7 (ICP/AES)
Zinc, Total	200.7 (ICP/AES)
Cyanide, Total	335.4 (Color, Auto)

G. If there is a change in ownership of this facility or in the name of the permittee, an application for transfer of the permit must be submitted to the DEP.

H. Requirements for Total Residual Chlorine (TRC)

Source Reduction and Chlorine Minimization

To reduce or eliminate the amount of chlorine discharged into water bodies, the permittee must

1. Implement source reduction activities 2. Improve operation/maintenance practices, and
3. Improve/adjust process controls.

The permittee will ensure that applied chlorine dosages, used for disinfection or other purposes, are optimized to the degree necessary such that the total residual chlorine in the discharge does not cause an adverse stream impact. In doing so, the permittee shall consider relevant factors affecting chlorine

dosage, such as wastewater characteristics, mixing and contact times, desired result of chlorination, and expected impact on the receiving water body.

The effluent limits for total residual chlorine contained in PART A of the permit is 0.5 mg/l as an average monthly limit. The limit is based on the data of the chlorine demand of the Delaware River during low tide conditions. DEP reserves the right to revise TRC limit based on additional data in the future collected during low and high tides conditions in the Delaware River.

If the DEP determines or receives documented evidence that levels of TRC in the discharge are causing adverse water quality impacts in the receiving water, the permittee shall be required to institute necessary additional steps to reduce or eliminate such impact.

I. Collected screenings, slurries, sludges, and other solids shall be handled and disposed of in compliance with 25 Pa. Code, Chapters 271, 273, 275, 281, 283, and 285 (relating to general provisions and requirements for landfilling, land application, composting, processing, and storage of municipal waste), Chapters 261a, 262a, 263a, and 270a (related to identification of hazardous waste, requirements for generators and transporters, and hazardous waste permit programs) and applicable Federal Regulations, the Federal Clean Water Act, RCRA, and their amendments.

J. The DEP may identify and require certain discharge specific data to be submitted before the expiration date of this permit. Upon notification by the DEP, the permittee will have 12 months from the date of the notice to provide the required data. These data, along with any other data available to the DEP, will be used in completing the Watershed TMDL/WLA Analysis and in establishing discharge effluent limits. In the event that DEP requires the submission of data pursuant to this condition, the permittee shall have the right to appeal or otherwise contest the requirement.

K. Instantaneous maximum limitations are imposed to allow for a grab sample to be collected by the appropriate regulatory agency to determine compliance. The permittee does not have to monitor for the instantaneous maximum limitation except for the parameters oil and grease, pH, total residual chlorine, and fecal coliform. However, if grab samples are collected for parameters normally monitored through composite sampling, the results must be reported.

L. The permittee shall operate the sewage treatment plant to provide treatment for the peak design wastewater without causing treatment plant upsets. Throttling of influent flows to the plant resulting in avoidable, premature sewer system overflows is prohibited.

M. The permittee shall monitor the overflow from the raw sewage pump station (EPS-1) at the sewage treatment plant during each overflow event. The date, time and volume shall be recorded and submitted to the DEP within 28 days after the end of each overflow event. Use the enclosed overflow report form.

N. The Commonwealth's Clean Streams Law (P.L. 1987, No. 394) delegates the authority to preserve and improve the purity of its waters and develop remedies to purify those waters currently polluted to DEP, in the form of adopting rules and regulations as necessary to accomplish these tasks. Water Quality analyses performed for the major watershed of the Commonwealth to date show that many of the rivers and streams of Pennsylvania have a very limited ability to assimilate additional total dissolved solids (TDS). TDS can adversely affect aquatic life due to increases in salinity. The major concern associated with high TDS concentrations relates to direct effects of increased salinity on the health of aquatic organisms and potable water supplies. The Department has begun the process of modifying regulations for TDS, chlorides, and sulfates that are designed to protect stream uses. The permit may be modified when these regulatory changes go into effect. At such time, the current TDS limits may be modified through an amendment to the permit.

O. The authorization to discharge 50 mgd of wastewater as contained in Part A of this permit is subject to the fact that construction/modification of the plant is completed in accordance with the Water Quality Management Permit No. 2311402 issued on December 6, 2011.

P. This permit may be modified or revoked and reissued, as provided pursuant to 40 C.F.R. 122.62 and 124.5, for the following reasons:

1. To include new or revised conditions developed to comply with any State or Federal law or regulation that addresses CSOs that is adopted or promulgated subsequent to the effective date of this permit.

2. To include new or revised conditions if new information, not available at the time of permit issuance, indicates that CSO controls imposed under the permit have failed to ensure the attainment of State Quality Standards.

3. To include new or revised conditions based on new information resulting from implementation of the long-term control plan.

In addition, this permit may be modified or revoked and reissued for any reason specified in 40 C.F.R. 122.62.

Q. Laboratory Certification

The Environmental Laboratory Accreditation Act of 2002 requires that all environmental laboratories register with the DEP. An environmental laboratory is any facility engaged in the testing or analysis of environmental samples required by a statute administered by the DEP relating to the protection of the environment or of public health, safety, and welfare.

R. The seasonal effluent limitations for fecal coliform are based on Chapter 92a (§ 92a.47(4) & (5)) of DEP's regulations and Delaware River Basin Commission's (DRBC's) Water Quality Regulations at § 4.30.4.A. DEP's regulations govern the summer limits for fecal coliform while the winter limits are based on DRBC's regulations. The DRBC regulations state that during winter season from October through April, the instantaneous maximum concentration of fecal coliform organisms shall not be greater than 1,000 per 100 milliliters in more than 10 percent of the samples tested. For reporting purposes, a copy of the guidelines on the 10 percent rule is enclosed with the permit.

S. On December 15, 2003, the U.S. Environmental Protection Agency (EPA), Regions 2 and 3, adopted a Total Maximum Daily Loads (TMDLs) for Polychlorinated Biphenyls (PCBs) for Zones 2, 3, 4, and 5 of the tidal Delaware River. The TMDLs require the facilities identified as discharging PCBs to these zones of the Delaware River or to the tidal portions of tributaries to these zones to conduct monitoring for 209 PCB congeners, and prepare and implement a PCB Pollutant Minimization Plan (PMP).

This facility has been identified as a Group 1 discharger. Group 1 dischargers have detected 4 or more PCB congeners and contribute to 99% of the cumulative PCB loading to Zones 2-5. Accordingly, the permittee shall collect one 24-hour composite sample per six months during a wet weather flow and one 24-hour composite sample per six months during a dry weather flow. The samples shall be collected from Outfall 001. The permittee shall report total PCB values on the DMR form from all these test results.

Sample collection protocols and criteria referenced at http://www.state.nj.us/drbc/quality/toxics/pcbs/monitoring.html shall be followed. All sample analyses shall be performed using EPA Method 1668A, Revision A: Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by HRGC/HRMS. EPA-821-R-00-002, December 1999 as supplemented or amended, and results for all 209 PCB congeners shall be reported. Project-specific analytical modifications, and reporting requirements found are at http://www.state.nj.us/drbc/quality/toxics/pcbs/monitoring.html shall be followed. Monitoring information, sample data, and reports associated with PCB monitoring shall be submitted to the DEP and DRBC in the form of two compact discs in the format referenced at http://www.state.nj.us/drbc/library/documents/PCB-EDD011309.pdf .

In accordance with the U.S. EPA, Regions 2 and 3, TMDLs for PCBs for Zones 2–5 of the Tidal Delaware River Estuary, the permittee submitted a PMP for PCBs to the DRBC in October 2005, *which was approved on* January 17, 2006.Therefore, the permittee shall:

i. Continue to implement the PMP to achieve PCB loading reduction goals, and;

ii. Submit an Annual Report to DRBC and the Department consistent with the guidance specified at http://www.state.nj.us/drbc/programs/quality/pmp.html. This Annual Report is due by January 31 of each year.

The PMP Annual Report and PCB data shall be submitted to the Department and DRBC at the following addresses:

PA Department of Environmental Protection
Southeast Regional Office
Clean Water Program
2 East Main Street
Norristown, PA 19401

Delaware River Basin Commission
Modeling, Monitoring & Assessment Branch
P.O. Box 7360
West Trenton, NJ 08628

T. The permittee shall not accept wastewater from natural gas well drilling, hydraulic fracturing or natural gas production for treatment and disposal at the DELCORA STP. If in the future the permittee proposes to accept these types of waste streams, the permittee must obtain approval from DEP prior to accepting these types of waste streams.

U. Within 30 days of the completion of construction of the outfall extension, the permittee shall notify DEP of such completion.

II. WHOLE EFFLUENT TOXICITY

Acute Testing

The permittee must perform quarterly Whole Effluent Toxicity (WET) tests to generate acute toxicity data on the cladoceran, *Ceriodaphnia dubia* and the fathead minnow, *Pimephales promelas* for the permit term. Acute toxicity testing shall follow Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002 (EPA-821-R-02-012). The dilution series to be used is 100%, 50%, 25%, 12.5% and 6.25%. The results shall be reported as Lethal Concentration for 50 percent of the population (LC_{50}) and Acute Toxic Units (TUa) at 48-hour and 96-hour durations for the fathead minnow *Pimephales promelas* and at a 48-hour duration for the cladoceran, *Ceriodaphnia dubia* . The calculated Acute Target In-stream Waste Concentration (TIWCa) is 62%.

Chronic Testing

The permittee must perform quarterly WET tests to generate chronic toxicity data on the cladoceran, *Ceriodaphnia dubia* and the fathead minnow, *Pimephales promelas* for the permit term. The results shall be reported as No Observed Effect Concentration (NOEC) and Chronic Toxic Units (TUc) with a Percent Minimum Significant Difference (PMSD) reported. The results shall also be reported as Inhibitory Concentration, 25 percent (IC_{25}). The testing should follow USEPA guidance on Short-Term Methods for Estimating the Chronic

Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA 821-R-02-013, 4th Edition, 2002). The dilution series to be used is 100%, 50%, 25%, 12.5% and 6.25%. The calculated Chronic Target In-stream Waste Concentration (TIWCc) is 18%.

The complete laboratory reports with a summary page of results from the testing must be submitted to the DRBC and DEP at the addresses listed below:

Dr. Thomas Fikslin
Delaware River Basin Commission
P.O. Box 7360
West Trenton, NJ 08628-0360

Department of Environmental Protection
Clean Water Program
2 East Main Street
Norristown, PA 19401

III. POTW PRETREATMENT PROGRAM IMPLEMENTATION

A. General Requirement – The permittee shall operate and implement a POTW pretreatment program in accordance with the federal Clean Water Act, the Pennsylvania Clean Streams Law, and the federal General Pretreatment Regulations at 40 CFR Part 403. The program shall also be implemented in accordance with the permittee's approved pretreatment program and any modifications thereto submitted by the permittee and approved by the Approval Authority.

B. Annual Report and Other Requirements – The permittee shall submit a Pretreatment Annual Report by March 31 of each year to EPA that describes the permittee's pretreatment activities for the previous calendar year. The Pretreatment Annual Report shall include a description of pretreatment activities in all municipalities from which wastewater is received at the permittee's POTW. A summarized discussion shall be incorporated into the permittee's Annual Municipal Wasteload Management Report required by 25 Pa. Code Chapter 94 and referenced in Part B I.C.4 of this permit. The Pretreatment Annual Report shall include the following information, at minimum:

1. Industrial Listing – The Annual Report shall contain an updated industrial listing providing the names and addresses of all current Significant Industrial Users (SIUs) and Non-Significant Categorical Industrial Users (NSCIUs), as defined in 40 CFR 403.3, and the categorical standard, if any, applicable to each. The listing must: (1) identify any users that are subject to reduced reporting requirements under 40 CFR 403.12(e)(3); (2) identify which users are NSCIUs; (3) identify any users that have been granted a monitoring waiver in accordance with 40 CFR 403.12(e)(2) as well as the pollutants for which the waiver was granted and the date of the last POTW sampling event for each pollutant; and (4) identify any categorical industrial users that have been given mass-based limits in place of concentration-based categorical limits in accordance with 40 CFR 403.6(c)(5) or concentration-based limits in place of mass-based categorical limits in accordance with 40 CFR 403.6(c)(6).

   In addition, the Annual Report shall contain a summary of any hauled-in wastes accepted at the POTW including the source of the wastes (domestic, commercial or industrial) and the receiving location for acceptance of the wastes. For each industrial source (whether or not classified as an SIU), the report shall indicate (1) the name and address of the industrial source; (2) the average daily amount of wastewater received; (3) a brief description of the type of process operations conducted at the industrial facility; (4) whether the source facility is a categorical industrial user (including NSCIU), significant industrial users, or non-significant industrial user; and (5) any controls imposed on the user.

2. Control Mechanism Issuance – The Annual Report shall contain a summary of SIU control mechanism issuance, including a list of issuance, effective, and expiration dates for each SIU control mechanism. For each general control mechanism issued, provide the names of all SIUs covered by the general control mechanism and an explanation of how the users meet the criteria of 40 CFR 403.8(f)(1)(iii)(A) for issuance of a general control mechanism.

3. Sampling and Inspection – The Annual Report shall contain a summary of the number and types of inspections and sampling events of SIUs by the permittee, including a list of all SIUs either not sampled or not inspected, and the reason that the sampling and/or inspection was not conducted. For any user subject to reduced reporting under 40 CFR 403.12(e)(3), the list shall include the date of the last POTW sampling event and the date of the last POTW inspection of the user. In addition, the report shall include a summary of the number of self-monitoring events conducted by each SIU and the number required to be conducted, including a list of all SIUs that did not submit the required number of reports and the reason why the reports were not submitted. For NSCIUs, the report shall provide the date of the compliance certification required under 40 CFR 403.12(q).

4. Industrial User Compliance and POTW Enforcement – The Annual Report shall contain a summary of the number and type of violations of pretreatment standards and requirements, including local limits, and the actions taken by the permittee to obtain compliance, including compliance schedules, penalty assessments and actions for injunctive relief. The report shall state whether each SIU was in significant noncompliance, as that term is defined in 40 CFR Section 403.8(f)(2)(viii), and include the parameter(s) in violation, the period of violation, the actions taken by the POTW in response to the violations, and the compliance status at the end of the reporting period. A copy of the publication of users meeting the significant noncompliance criteria shall be included. In addition, the report shall provide a list of users previously designated as NSCIUs that have violated (to any extent) any pretreatment standard or requirement during the year and the date and description of the violation(s).

5. Summary of POTW Operations – The Annual Report shall contain a summary of any interference, pass-through, or permit violations by the POTW and indicate the following: (1) which, if any, permit violations may be attributed to industrial users; (2) which IU(s) are responsible for such violations; and (3) the actions taken to address these events. The report shall also include all sampling and analysis of POTW treatment plant influent, effluent, and sludge conducted during the year for local limit and priority pollutants identified pursuant to Section 303(d) of the Clean Water Act, 33 U.S.C. 1313(d).

6. Pretreatment Program Changes – The Annual Report shall contain a summary of any changes made or proposed to the approved program during the period covered by the report and the date of submission to the Approval Authority.

C. Routine Monitoring – The permittee shall conduct monitoring at its treatment plant that, at a minimum, includes quarterly influent, effluent, and sludge analysis for all pollutants for which local limits have been established, and an annual priority pollutant scan for influent and sludge.

D. Notification of Pass Through or Interference – The permittee shall notify EPA and DEP, in writing, of any instance of pass through or interference, as defined at 40 CFR 403.3(p) and (k), respectively, known or suspected to be related to a discharge from an IU into the POTW. The notification shall be attached to the DMR submitted to EPA and DEP and shall describe the incident, including the date, time, length, cause (including responsible user if known), and the steps taken by the permittee and IU (if identified) to address the incident. A copy of the notification shall also be sent to the EPA at the address provided below.

E. Adopt Local Limits – The permittee shall adopt the revised local limits within 60 days of EPA approval of local limits and notify all contributing municipalities and industrial users of the revised local limits.

F. Changes to Pretreatment Program – EPA and DEP may require the permittee to submit for approval changes to its pretreatment program if any one or more of the following conditions is present:

1. The program is not implemented in accordance with 40 CFR Part 403;

2. Problems such as interference, pass through or sludge contamination develop or continue;

3. The POTW proposes to introduce new pollutants or an increased loading of approved pollutants as described in Part A III.C.2 of this permit;

4. Federal, State, or local requirements change;

5. Changes are needed to assure protection of waters of the Commonwealth.

Program modification is necessary whenever there is a significant change in the operation of the pretreatment program that differs from the information contained in the permittee's submission, as approved under 40 CFR 403.11.

G. Procedure for Pretreatment Program Changes – Upon submittal by the permittee, and written notice of approval by the Approval Authority to the permittee of any changes to the permittee's approved pretreatment program, such changes are effective and binding upon the permittee unless the permittee objects within 30 days of receipt of the written notice of approval. Any objection must be submitted in writing to EPA and DEP.

H. Correspondence – The Approval Authority shall be EPA at the following address:

Pretreatment Coordinator (3WP41)
U.S. Environmental Protection Agency
1650 Arch Street
Philadelphia, PA 19103-2029

IV. REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS

A. Prohibition of Nonstormwater Discharges

1. Except as provided in A.2, all discharges to stormwater Outfalls 028, 029,030, and 031 shall be composed entirely of stormwater and allowable nonstormwater as specified in A.2 below.

2. The following nonstormwater discharges may be authorized, provided the discharge is in compliance with D.2.b: discharges from fire fighting activities; fire hydrant flushings, potable water sources, including waterline flushings, irrigation drainage, lawn watering, routine external building washdown which does not use detergents or other compounds, pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used, air conditioning condensate, springs, uncontaminated groundwater, and foundation or footing drains where flows are not contaminated with process materials such as solvents.

B. Spills

This permit does not authorize the discharge of any polluting substances resulting from an on-site spill. Such spills shall be controlled through proper implementation of a Preparedness, Prevention, and Contingency (PPC) Plan as stated in Section D below.

C. This permit does not authorize any discharge (stormwater or nonstormwater) containing any pollutant that may cause or contribute to an impact on aquatic life or pose a substantial hazard to human health or the environment due to its quantity or concentration.

D. Preparedness, Prevention, and Contingency Plans

1. Development of Plan

Operators of facilities shall have developed a PPC Plan in accordance with 25 Pa. Code Section 91.34 and the "Guidelines for the Development and Implementation of Environmental Emergency Response Plans." The PPC Plan shall identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the facility. In addition, the PPC Plan shall describe the BMPs that are to be used to reduce the pollutants in stormwater discharges at the facility ensuring compliance with the terms and conditions of this permit. The PPC Plan shall be completed within 150 days from the permit effective date, if it has not been completed yet or if it needs an update.

2. Nonstormwater Discharges

   a. The PPC Plan shall contain a certification that the discharge has been tested or evaluated for the presence of nonstormwater discharges. The certification shall include the identification of potential significant sources of nonstormwater at the site, a description of the results of any test and/or evaluation for the presence of nonstormwater discharges, the evaluation criteria or testing methods used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. Such certification may not be feasible if the facility operating the stormwater discharge does not have access to an outfall, manhole, or other point of access to the ultimate conduit that receives the discharge. In such cases, the source identification section of the PPC Plan shall indicate why the certification was not feasible. A discharger that is unable to provide the certification must notify the DEP within 90 days of the effective date of this permit.

   b. Except for flows from fire fighting activities, sources of nonstormwater listed in A.2. (authorized nonstormwater discharges) that are combined with stormwater discharges must be identified in the Plan. The Plan shall identify and ensure the implementation of appropriate pollution prevention measures for the nonstormwater component(s) of the discharge.

3. Special Requirements for SARA Title III, Section 313 Facilities

   a. Facilities subject to SARA Title III, Section 313 shall include in the PPC Plan a description of releases to land or water of Section 313 water priority chemicals that have occurred within the last three years. Each of the following shall be evaluated for the reasonable potential for contributing pollutants to runoff: loading and unloading operations, outdoor storage activities, outdoor manufacturing or processing activities, significant dust or particulate generating process, and on-site waste disposal practices. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with stormwater; and history of significant leaks or spills of toxic or hazardous pollutants.

   b. Engineering Certification. No stormwater PPC Plan for facilities subject to SARA Title III, Section 313 requirements for chemicals that are classified as "Section 313 water priority chemicals" shall be effective unless it has been reviewed by a Registered Professional Engineer and certified to by such Professional Engineer. A Registered Professional Engineer shall recertify the PPC Plan every year thereafter. This certification may be combined with the required annual evaluation in D.4. By means of these certifications, the engineer, having examined the facility and being familiar with the provisions of this part, shall attest that the storm water PPC Plan has been prepared in accordance with good engineering practices. Such certification shall in no way relieve the owner or operator of a facility covered by the PPC Plan of the duty to prepare and fully implement such Plan.

4. Comprehensive Site Compliance Evaluations and Recordkeeping

   Qualified personnel shall conduct site compliance evaluations at least once a year. Such evaluations shall include:

   a. Visual inspection and evaluation of areas contributing to a stormwater discharge for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural stormwater management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the Plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the Plan, such as spill response equipment, shall be made.

   b. Based on the results of the inspection, the description of potential pollutant sources identified in the PPC Plan, and pollution prevention measures and controls identified in the Plan shall be revised as appropriate within 15 days of such inspection and shall provide for implementation of any changes to the Plan in a timely manner, but in no case more than 90 days after the inspection.

c. A report summarizing the scope of the inspection, using the DEP's Annual Inspection form shall be completed and made available upon request and retained as part of the PPC Plan for at least one year after coverage under this permit terminates.

E. Stormwater Sampling and Reporting

1. If stormwater samples are required by this permit, they shall be collected as grab samples during the first 30 minutes, but no later than one-hour of the discharge resulting from a storm event that occurs at least 72 hours from the previously measurable storm event.

2. When the discharger is unable to collect samples due to adverse climatic conditions, the discharger must submit, in lieu of sampling data, a description of why samples could not be collected, including available documentation of the event. This sampling waiver may not be used more than once during a two-year period.

3. Stormwater monitoring results shall be summarized on a DMR form and the DEP's "Additional Information for the Reporting of Stormwater Monitoring" form.

4. When a facility has two or more outfalls that may reasonably be believed to discharge substantially identical effluents, based on a consideration of features and activities within the area drained by the outfall, the permittee may sample one such outfall and report that the quantitative data also applies to the substantially identical outfalls.

   Outfall 028 has been determined to be representative of Outfalls 029, 030, and 031.

5. The following table describes the outfall locations and drainage areas:

Outfall No.	Acreage	Latitude	Longitude	Area Description
028	7.5	39° 49' 30"	75° 23' 45"	Primary treatment units and parking area around the administrative buildings (B2 and B5).
029	11.25	39° 49' 30"	75° 23' 30"	Primary treatment units, sludge storage and processing, truck loading, and waste storage.
030	6.25	39° 49' 30"	75° 23' 45"	Secondary treatment units.
031	6.25	39° 49' 30"	75° 23' 30"	Secondary treatment units, and former ash lagoon.

F. Stormwater Best Management Practices (BMPs)

The permittee shall implement at least the following BMPs:

- Manage sludge in accordance with all applicable permit requirements; temporarily collect and store sludge in enclosed containers or tanks.

- Store chemicals in secure and covered areas on impervious surfaces away from storm drains.

- For new facilities and improvements: Design wastewater treatment facilities to avoid, to the maximum extent practicable, storm water commingling with sanitary wastewater.
- Efficiently use herbicides for weed control; where practicable, investigate use of the least toxic herbicides; do not apply during windy conditions.
- Do not wash parts or equipment over impervious surfaces that wash into storm drains.
- Conduct Good Housekeeping Practices.
- Implement infiltration techniques, including infiltration basins, trenches, dry wells, porous pavements, etc., wherever practicable.

V. COMBINED SEWER OVERFLOWS

A. Management and Control of Combined Sewer Overflows

1. CSOs are point source discharges that must be provided control measures in accordance with the Federal Clean Water Act and the 1994 National CSO Policy. The point source discharges listed on PART A serve as combined sewer reliefs necessitated by stormwater entering the sewer system and exceeding the hydraulic capacity of the sewers and/or the treatment plant. CSOs are allowed to discharge only when flows in combined sewer systems exceed conveyance or treatment capacities of the system during wet weather periods. Dry weather overflows are prohibited.

2. Water bodies receiving CSO discharges in the DELCORA-STP service area covering this permit include the Delaware River, Chester, and Ridley Creeks.

B. Continued Implementation of Technology-Based Nine Minimum Controls

The permittee shall submit an annual report by March 31 each year to the DEP, with the appropriate documentation, demonstrating continued implementation of and compliance with the following nine minimum technology-based controls (NMCs) required on a system wide basis:

1. Proper Operation and Maintenance

2. Maximum Use of the Collection System

Where possible, DELCORA shall maximize the in-line storage capacity of the collection system, and shall keep records to document implementation.

3. Review/Modification of pre-treatment program

DELCORA shall continue to implement selected CSO controls to minimize the impact of nondomestic discharges on CSOs. DELCORA shall reevaluate, at an appropriate frequency, whether additional modifications to its pretreatment program are feasible or of practical value. DELCORA shall keep records to document this evaluation and implementation of the selected CSO controls to minimize CSO impacts resulting from nondomestic discharges.

4. Maximization of flow to the POTW for treatment

DELCORA shall operate the POTW treatment plant at maximum treatable flow during wet weather flow conditions/events and deliver all flows to the treatment plant within the constraints of the capacity of the localized conveyance capacities of the sewer system and the capacity of the treatment plant. DELCORA shall keep records to document these actions.

5. Elimination of dry weather CSOs

Dry weather overflows from CSO outfalls are prohibited. When DELCORA detects a dry weather overflow, corrective action work shall begin immediately. DELCORA shall inspect the dry weather overflow each subsequent day until the overflow has been eliminated. DELCORA shall record dry weather overflows in the inspection logbook. Recorded information shall include the cause of the overflow, corrective measures taken, and the dates of the beginning and cessation of the overflow.

6. Controls of solids and floatables:

   DELCORA shall implement measures to control solids and floatable materials in the CSOs. These measures shall include, but are not be limited to:

   a. Augmentation of the City of Chester's storm sewer inlet replacement program to reimburse the City for inlets it replaces beyond those currently funded up to an amount not to exceed $75,000 per year for a 12-year period.

   b. Increasing public awareness through public education and information programs.

7. Pollution prevention programs

   DELCORA shall implement a pollution prevention program focused on reducing the impact of CSOs on receiving waters. DELCORA shall keep records to document pollution prevention implementation activities.

8. Public notification of CSO occurrence/impacts:

   DELCORA shall continue to implement a public notification plan to inform citizens of when and where CSOs occur. The process must include:

   a. A series of sensors and a model to determine the duration and amount of discharge to the receiving water body.

   b. Maintain, where accessable to the public, CSO outfall signage to indicate locations of CSOs.

   c. Inform the public through an annual newsletter or brochure describing CSO issues, the LTCP, and project benefits or sewer impact issues

9. Monitoring to effectively Characterize CSO Impacts and the Efficiency of CSO Controls:

   The permittee shall report on the status and effectiveness of each of the NMCs in the Annual "CSO" Status Report. The permittee shall incorporate "CSO" discharge characterizations in its comprehensive watershed assessment program to assess program performance.

C. Implementation of Water Quality-Based Long Term Control Plan (LTCP)

1. DELCORA submitted the updated Long Term Control Plan to EPA on February 1, 2011. DELCORA shall continue implementation of the April 1999 LTCP and July 2008 addendum to the LTCP until the updated plan is approved. Implementation of the updated plan shall result in compliance with water quality standards. The updated LTCP must be in accordance with the 1994 National CSO Control Policy.

2. The LTCP requires Public Participation in accordance with EPA Guidance Document No. EPA 832-B-95-002, entitled *"Guidance for Long Term Control Plan."*

3. The permittee shall implement Phases I and II of the existing LTCP in accordance with the following schedule:

   a. Phase I - Implementation of the Nine Minimum Controls (NMC). Implementation of the NMC is currently underway and shall continue in accordance with DELCORA's *CSO* Documentation:

Delaware County Regional Water Quality Control Authority (DELCORA) Western Regional Treatment Plant (WRTP) Nine (9) Minimum Controls (NMC) for Correction of Combined Sewer Overflows (CSO), Manual, dated July 1995.

b. Phase II - Completion of Capital Improvements Projects - Implementation of the Capital Improvements shall be in accordance with the CSO LTCP schedule. The projects and estimated completion dates are as follows:

LTCP Reference (April 1999)				
Project			**Page**	**Completion Date**
1.	Regulator Replacement and Tide Gate Monitoring:			
	a.	Replace all McNulty Regulators, at least one per year, with Brown and Brown regulators.	6-2	See Below
	b.	Install regulator and tide gate monitoring system on newly installed Brown and Brown regulators.	6-1	See Below

Regulator Replacement and Tide Gate Monitoring System Installation Schedule (Per July 2008 LTCP addendum)

i. DELCORA has replaced the following Regulators since LTCP was approved in 1999:

Regulator Nos.	Location	Receiving Water Body	Descriptions (Regulator Size, Type and back Flow devices)
002	Front and Booth	Delaware River	5" x 7½" Brown & Brown
003	Front and Highland	Delaware River	7½" x 7¾" Brown & Brown
005	Front and Townsend	Delaware River	12" x 12" Brown & Brown with Double Tide Gate
008	2nd and Tilghman	Delaware River	7½" x 12⅜" Brown & Brown with Double Tide Gate
009	2nd and Lloyd	Delaware River	7½" x 12⅜" Brown & Brown with Double Tide Gate
011	2nd and Parker	Delaware River	5" x 9¼" Brown & Brown
012	2nd and Edgmont	Chester Creek	Brown & Brown with 24" x 24" Rubber Tide Gate
016	8th and McDowell	Ridley Creek	7½" x 12⅜" Brown & Brown with Double 60" x 60" Rubber Tide Gate
020	Kerlin and Finland	Chester Creek	7½" x 7¾" Brown & Brown
021	9th and Sproul	Chester Creek	7½" x 7¾" Brown & Brown with Double 18" x 18" Rubber Tide Gate
022	6th and Sproul	Chester Creek	5" x 6" Brown & Brown
023	3rd and Edgmont	Chester Creek	7½" x 7¾" Brown & Brown with Double 36" x 36" Rubber Tide Gate
024	3rd and Dock	Chester Creek	5" x 9¼" Brown & Brown with Double 48" x 48" Rubber Tide Gate
025	5th and Penn	Chester Creek	5" x 6" Brown & Brown with Double 36" x 36" Rubber Tide Gate
026	7th and Penn	Chester Creek	7½" x 12⅜" Brown & Brown

ii. The following Regulator replacement (Capital Improvement Projects) is planned beyond year 2012:

Completion Year	Regulator Nos.	Location	Receiving Water Body	Descriptions (Regulator Size, Type, and Back Flow Devices)
2014	013	2nd and Welsh	Delaware River	8" McNulty
2015	010	5th and Pusey	Delaware River	12" McNulty
2017	014	3rd and Upland	Delaware River	8" McNulty
2018	004	Front and Hayes	Delaware River	8" McNulty with Duckbill
2020	018	Sun Drive and Hancock	Ridley Creek	5" x 6" Brown & Brown with Tide Gate
2021	017	9th and Campbell	Ridley Creek	5" x 6" Brown & Brown with Single Neehah Cast Iron Tide Gate
2022	015	4th and Melrose	Ridley Creek	5" x 6" Brown & Brown with Single Neehan No. R-50-50-SF-36 Tide Gate
2023	007	Delaware and Reaney	Delaware River	5" x 6" Brown & Brown
2024	019	14th and Crozer Hospital	Chester Creek	7½" x 15⅜" Brown & Brown

The DEP recognizes that the estimated completion dates for the capital improvement projects contained in this permit may not be achieved as a result of factors beyond the permitte's reasonable controls, such as force majeure events. Such force majeure events include, but is not limited to, weather delays, labor actions, poor, or untimely performance by the permittee's contractors, changes to the construction plans, or methods of construction which could not be seen reasonable foreseen by the permitted, etc. Should a force majeure event occur, the DEP may extend the estimated completion date so as to compensate the permitted for the time lost due to force majeure event.

LTCP Reference (April 1999)			
Project		**Page**	**Completion Date**
2.	Inlet Replacement:	4-5 and 6-3	*
3.	Modified Sewer Cleaning Program:		
	Implement the modified sewer cleaning program as developed in CY2000.	6-3	Ongoing Basis
4.	Ongoing Monitoring Program Impacts:		
	Implement ongoing monitoring program.	6-6	Ongoing Basis
5.	Public Information/Education Program:		
	Update newsletter describing CSO Issues, the LTCP and project benefits	6-4	**

*DELCORA shall augment the City of Chester's storm sewer replacement program by reimbursing the city for inlets it replaces beyond those currently funded up to an amount not to exceed $75,000 per year for a

period of 12 years. It is intended that the inlets replaced with these funds be located in areas with severe debris problems or in areas tributary to Chester or Ridley Creeks.

**DELCORA shall continue mailing newsletter by August 31 annually describing CSO issues as detailed in nine Minimum Control Plans, under the LTCP, and the projected benefits of the program on an ongoing basis. Public input will be considered in an annual program review conducted by DELCORA.

D. Ongoing Monitoring Program:

DELCORA shall monitor the wastewater at the following three locations within 30 minutes of a rainfall and submit a report to the DEP, within 28 days of the sampling event:

1. 2nd and Dock Streets Pump Station (sample wet well).
2. CSO Outfall 018 – Sun Drive and Hancock Street.
3. CSO Outfall 019 – 14th Street and Crozer Hospital.

The monitoring frequency, parameters, and sample type are as follows:

Parameter	Sample Type	Measurement Frequency
Biological Oxygen Demand (BOD)	Grab (mg/l)	Annual
Ammonia	Grab (mg/l)	Annual
Total Suspended Solids	Grab (mg/l)	Annual
Phosphorus	Grab (mg/l)	Annual
Fecal Coliform	Grab (#/100 ml)	Annual

Grab samples shall be collected within first 30 minutes of the discharge.

E. Reporting Requirements:

1. LTCP Implementation

The permittee shall submit an annual report by March 31 each year that describes the efforts to date on Phase II projects to include information on future planned activities.

2. Special Reporting Forms:

The permittee shall continue to record and submit monthly, CSO discharges and related data on DEP approved CSO Supplemental Report forms - Monthly Inspection Report and Detailed Outfall Report (copies attached).

3. Annual CSO Status Report:

The permittee shall submit an annual Chapter 94, "Municipal Wasteload Management Report." The report shall provide a summary of the frequency, duration, and volume of the CSOs discharges for the past calendar year, the operational status of major overflow point and an identification of known or potential instream water quality impacts and their cause. The report shall also summarize all actions to implement the approved Plan of Actions and their effectiveness, and shall evaluate and provide necessary revisions to the Plan of Actions approved by DEP. Specifically, the following information shall be included in the report:

a. Rain gauge data

Total inches (to the nearest 0.01 inch) that fell each day and month for the period of the report.

b. Inspections and maintenance

Total number of regulator inspections conducted during the period of the report (reported by the drainage system).

A list of blockages (if any) corrected or other interceptor maintenance performed, including location, date and time discovered, date and time corrected, and any discharges to the stream observed and/or suspected to have occurred.

c. Dry weather overflows

For all dry weather overflows, indicate location, date and time discovered, date and time corrected/ceased, and action(s) taken to prevent their reoccurrence.

d. Wet weather overflows

For all locations that have automatic level monitoring of the regulators, report all exceedances of the overflow level during the period of the report, including location, date, time, and duration of wet weather overflows.

e. Chronic or continuous discharges

Provide the status and corrective actions taken at all sites identified as being chronic or continuous discharges including an estimate of the flow and duration during the month covered by the report.

f. Benefit to the estuary

Provide information, with supporting data, that describes how treating flows in excess of the plants design maximum daily flow has been a benefit to the estuary.

The report shall be submitted to:

Program Manager
Clean Water Program
Department of Environmental Protection
2 East Main Street
Norristown, PA 19401

Water Protection Division
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

F. Prohibition of SSOs:

Unless otherwise authorized under PART B of this permit, any discharge from any point other than a permitted treatment plant outfall or permitted combined sewer system outfalls is prohibited. In the event there is a prohibited discharge from a sewer conveyance system, notify every such discharge to the DEP immediately and report on your monthly DMR in the remarks block. Indicate the date of discharge, volume and duration of discharge and action taken to cease the discharge.

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

INSTRUCTIONS FOR COMPLETING DISCHARGE MONITORING REPORTS (DMRs)

General

One or more Discharge Monitoring Reports (DMRs) are attached to your permit for reporting the results of self-monitoring activities as required by your permit. You should make copies of the DMRs for your ongoing use, unless you elect to participate in the Department of Environmental Protection's (DEP's) electronic DMR (eDMR) program (see www.dep.state.pa.us/edmr).

- Reporting frequencies will vary depending on the monitoring frequencies listed in your permit, and are generally monthly, quarterly semi-annually and annually.
- Your reports must be received by DEP on the 28th day of the month following the end of the reporting period, unless otherwise specified in Part C of your permit.
- Your permit may require submission of DMRs to other agencies, including the U.S. Environmental Protection Agency (EPA).
- If you receive DMRs in the mail from EPA, please discontinue use of DMR Form No. 3800-FM-BPNPSM0462 and begin using EPA's DMRs.
- DMRs will generally include pre-populated information for permittee name and address, facility location, permit number, outfall number, permit expiration date, parameter names, and permit requirements. If you identify any errors on a DMR issued by DEP, please contact the DEP regional office that issued your permit. If you identify any errors on a DMR issued by EPA, please contact DEP's Central Office at 717-787-6744. **DO NOT make changes to DMRs issued to you**.
- You may use computer-generated replicas of Form No. 3800-FM-BPNPSM0462 or of EPA's DMR if you receive prior approval from DEP and EPA. **DEP reserves the right to instruct you to discontinue the submission of computer-generated DMRs if the permit requirements you entered on the form are inaccurate.**

Instructions

1. Enter statistical results into each blank field below the "VALUE" column headers. Results must be reported in the same units shown on the DMR.
2. Sum the total number of excursions or exceedances of permit limits across the row for each parameter and enter the value into the "NO. EX" field. For example, if the permit contains limits of 6.0 S.U. (Minimum) and 9.0 S.U. (Maximum) for pH, and the Minimum and Maximum results are 5.9 S.U. and 9.1 S.U., respectively, enter "2" into the "NO. EX" field.
3. Report the actual sampling frequency and sample type utilized during the reporting period in the fields corresponding to "Frequency of Analysis" and "Sample Type", respectively.
4. Type the name of the principal executive officer (or an authorized agent designated by a principal executive officer) who is taking responsibility for the report, sign the report (should be in ink), enter the telephone number of the responsible individual, and record the date that the report was signed. Mail only original, signed copies of DMRs.
5. In the Comments section at the bottom of the DMR, you may write a brief summary of violations in this section; however, DEP requests that all violations during the monitoring period be reported in more detail on DEP's **Non-Compliance Reporting Form** (3800-FM-BPNPSM0440) and be submitted as an attachment to the DMR. Other uses of the Comments Section include explanations of attachments to the DMR, explanations for the unavailability of data, and brief summaries of issues that have affected operations or effluent quality during the monitoring period. Always consider attaching a letter or separate document to explain your situation in more detail.

No Discharge or No Data Available

If there was no discharge at all from an outfall during the monitoring period, check the "No Discharge" box on the top of the DMR. Complete the information above and below the table and mail the DMR to the appropriate agencies. Be sure to sign and date the DMR.

If there was no discharge of a specific parameter (e.g., if a chlorine limit is in the permit but chlorine was not used for disinfection during the entire reporting period), or if data are not available for a specific parameter for the entire reporting period, do not leave the DMR blank. Instead, report one of the following No Data Indicator (NODI) codes that apply to your situation in the appropriate value field, and **provide an explanation as an attachment to the DMR**:

A Use if you are exempted from monitoring the parameter because of a General Permit condition.

E Use if all samples or results are not available for the reporting period due to equipment failure or because sample collection was overlooked or samples could not be collected for the parameter.

GG Use if your permit requires sample collection and analysis only under certain conditions and those conditions were not met during the reporting period (e.g., report chlorine results only when chlorination system is used).

FF Other: use if there is any reason for the absence of data that is not covered by those above.

If you have at least one result for a parameter, the value should be reported and not a NODI code.

Calculations

The following explains how to calculate statistical values that are commonly required by permits:

Monthly Average – For Loading (lbs/day), sum the total of daily loadings and divide by the number of samples during the month. To calculate the daily loading, multiply the daily concentration (mg/l) by the flow (MGD) on the date of sampling and a conversion factor of 8.34. For Concentration, sum the total of daily concentrations and divide by the number of samples.

Weekly Average – For Loading (lbs/day), sum the total of average daily loadings during each week of the reporting period (beginning on a Sunday and ending on a Saturday) and divide by the number of samples during the week. For Concentration, sum the total of daily concentrations each week and divide by the number of samples. Report the maximum weekly average on the DMR.

Maximum Daily ("Daily Max") – Report the maximum concentration or load measured during a 24-hour period during the reporting period; if multiple measurements are taken daily, include all data in the analysis.

Instantaneous Maximum ("IMAX") – Report the maximum result obtained by a grab sample for a specific pollutant over the entire reporting period covered by a DMR.

Instantaneous Minimum ("Minimum") – Report the minimum result obtained by a grab sample for a specific pollutant over the entire reporting period covered by a DMR.

Total Monthly Load (lbs) – Sum the total of average daily loadings, divide by the number of samples during the month, and multiply by the number of days in the month.

Geometric Mean – Report the average of a set of *n* sample results given by the *n*th root of their product. If any result is zero (0), substitute 1 for the calculation. For example, five samples were analyzed with the following results: 20, 300, 400, 500, and 0. The calculation of geometric mean is as follows (note that you will need to use the power function on a calculator):

$$\sqrt[5]{20 \cdot 300 \cdot 400 \cdot 500 \cdot 1} = \sqrt[5]{1{,}200{,}000{,}000} = (1{,}200{,}000{,}000)^{1/5} = \mathbf{65}$$

Non-Detect Data

Conventional and Toxic Parameters

For calculating average values of data sets in which there are some "detections" (results at or above the laboratory reporting limit) and some "non-detect" data (results reported below the laboratory reporting limit), use the reporting limit for non-detect data. In other words, ignore the less than (<) symbol for statistical calculations and include the < symbol with the statistical result if there is at least one non-detect result in the data set. For example, four samples were analyzed with the following results: < 1.0, 2.0, < 1.0, and 1.0. The average statistical result is < 1.3.

Where the permit includes an effluent limitation for a parameter that is less than the most sensitive detection limit available, and the laboratory reports a value at or below the lowest level specified by the permit, you may use zero (0) in the calculation in lieu of the reporting limit, if the parameter is identified in 25 Pa. Code Chapter 16, Appendix A, Tables 2A and 2B. In general, parameters with limitations that are less than the most sensitive detection limit will be identified in Part C of the permit, if applicable.

Bacteria Parameters

Report all "non-detect" (e.g., < 2) and "too numerous to count" (TNTC) (e.g., > 2,000) results on DMR supplemental forms as reported by the laboratory. Do not report "TNTC" on supplemental forms, but instead report a value qualified with the">" symbol. Where a data set includes one or more "non-detect" and/or TNTC results, calculate the geometric mean by ignoring qualifying symbols, but report the value with the symbol. If a data set includes both ">" and "<" qualifiers, the ">" qualifier takes precedence for reporting. For all "non-detect" values, specify in the Comments section of the DMR the maximum volume filtered at the laboratory.

Example 1 – For results are determined, < 2, 10, 20, and 30. The geometric mean should be reported as $< (2 \bullet 10 \bullet 20 \bullet 30)^{0.25} = < 10$. Specify the maximum volume filtered for the < 2 result in the DMR Comments.

Example 2 – Three results are determined, < 2, 1,000, and > 2,000. The geometric mean should be reported as $> (2 \bullet 1{,}000 \bullet 2{,}000^{0.333} = > 158$.

Rounding and Precision

Statistical values reported on the DMR should be rounded to the same number of decimal places as the limit for the parameter as set forth in the permit. If the permit does not contain a limit but requests monitoring only, statistical values for concentration results should be rounded to the maximum number of decimal places in the data set as reported by the laboratory or the instrument used for analysis. If mass loads must be reported and there is no limit, round statistical values to the nearest whole number, unless the calculated number is less than one, in which case the value should be rounded to one significant figure (e.g., 0.1, 0.05, etc.). If the number you are rounding is followed by 5, 6, 7, 8, or 9, round the number up, otherwise round down.

The documents "Discharge Monitoring Reports Overview and Summary" (3800-BK-DEP3047) and "Management of Non-Detect Results for Discharge Monitoring Reports" (3800-FS-DEP4262) contain more information and are incorporated by reference. These documents are available on DEP's website.

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PRIMARY FACILITY NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103 A-2	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Interim

Reporting Frequency: Monthly
DMR Effective From: August 1, 2017
DMR Effective To: Completion of plant expansion
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Carbonaceous Biochemical Oxygen Demand (CBOD5)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	7000 Avg Mo	10500 Wkly Avg	lbs/day	XXX	19 Avg Mo	29 Wkly Avg	mg/L		1/day	24-Hr Composite
Total Suspended Solids	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	11000 Avg Mo	16500 Wkly Avg	lbs/day	XXX	30 Avg Mo	45 Wkly Avg	mg/L		1/day	24-Hr Composite
Total Dissolved Solids	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report Daily Max	mg/L		2/month	24-Hr Composite
Oil and Grease	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	5500 Avg Mo	XXX	lbs/day	XXX	15 Avg Mo	30 IMAX	mg/L		1/day	Grab
Ammonia-Nitrogen	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	XXX	mg/L		2/month	24-Hr Composite
Copper, Total	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	XXX	mg/L		1/month	24-Hr Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).		TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PRIMARY FACILITY NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103 A-2	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Final

Reporting Frequency: Monthly
DMR Effective From: Completion of plant expansion
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

___ Check Here if No Discharge
NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Carbonaceous Biochemical Oxygen Demand (CBOD5)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	7000 Avg Mo	10500 Wkly Avg	lbs/day	XXX	17 Avg Mo	25 Wkly Avg	mg/L		1/day	24-Hr Composite
Total Suspended Solids	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	12500 Avg Mo	18760 Wkly Avg	lbs/day	XXX	30 Avg Mo	45 Wkly Avg	mg/L		1/day	24-Hr Composite
Total Dissolved Solids	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	1000 Avg Mo	2000 Daily Max	mg/L		2/month	24-Hr Composite
Oil and Grease	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	6250 Avg Mo	XXX	lbs/day	XXX	15 Avg Mo	30 IMAX	mg/L		1/day	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	28770 Avg Mo	XXX	lbs/day	XXX	69 Avg Mo	XXX	mg/L		2/month	24-Hr Composite
Ammonia-Nitrogen May 1 - Oct 31	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	9590 Avg Mo	XXX	lbs/day	XXX	23 Avg Mo	XXX	mg/L		2/month	24-Hr Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).		TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Final

PRIMARY FACILITY NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103 A-2	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: Completion of plant expansion
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Copper, Total	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	0.027 Avg Mo	0.053 Daily Max	mg/L		1/month	24-Hr Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).		TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PRIMARY FACILITY NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103 A-2	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Semi-Annually
DMR Effective From: August 1, 2017
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
PCBs Dry Weather Analysis	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	XXX	Report Daily Max	pg/L		1/6 months	24-Hr Composite
PCBs Wet Weather Analysis	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	XXX	Report Daily Max	pg/L		1/6 months	24-Hr Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).		TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PRIMARY FACILITY NAME/ADDRESS

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

NAME	DELCORA STP
CLIENT	DELCORA
ADDRESS	100 East Fifth Street
	Chester, PA 19016-0999
LOCATION	Chester City
	Delaware County
WATERSHED	3-G

PA0027103 A-2	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency:	Monthly
DMR Effective From:	August 1, 2017
DMR Effective To:	April 30, 2018
Permit Expires:	April 30, 2018
Permit Application Due:	November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Flow	SAMPLE MEASUREMENT			MGD				XXX		Continuous	Metered
	PERMIT REQUIREMENT	Report Avg Mo	Report Daily Max		XXX	XXX	XXX				
pH	SAMPLE MEASUREMENT			XXX				S.U.		1/day	Grab
	PERMIT REQUIREMENT	XXX	XXX		6.0 Inst Min	XXX	9.0 IMAX				
Total Residual Chlorine (TRC)	SAMPLE MEASUREMENT			XXX				mg/L		1/day	Grab
	PERMIT REQUIREMENT	XXX	XXX		XXX	0.5 Avg Mo	1.0 IMAX				
Carbonaceous Biochemical Oxygen Demand (CBOD5) Raw Sewage Influent	SAMPLE MEASUREMENT			lbs/day				mg/L		1/day	24-Hr Composite
	PERMIT REQUIREMENT	Report Avg Mo	XXX		XXX	Report Avg Mo	XXX				
Biochemical Oxygen Demand (BOD5) Raw Sewage Influent	SAMPLE MEASUREMENT			lbs/day				mg/L		1/week	24-Hr Composite
	PERMIT REQUIREMENT	Report Avg Mo	XXX		XXX	Report Avg Mo	XXX				
BOD, carbonaceous, 20 day, 20 C	SAMPLE MEASUREMENT			lbs/day				XXX		1/week	24-Hr Composite
	PERMIT REQUIREMENT	10500 Avg Mo	XXX		XXX	XXX	XXX				

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).					
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PRIMARY FACILITY NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103 A-2	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: August 1, 2017
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
BOD, carbonaceous, 20 day, 20 C Percent Removal	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	89.25 Min Mo Avg	XXX	XXX	%		1/week	24-Hr Composite
Total Suspended Solids Raw Sewage Influent	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	Report Avg Mo	XXX	lbs/day	XXX	Report Avg Mo	XXX	mg/L		1/day	24-Hr Composite
Fecal Coliform Oct 1 - Apr 30	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	200 Geo Mean	1000 IMAX	No./100 ml		1/day	Grab
Fecal Coliform May 1 - Sep 30	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	200 Geo Mean	1000 IMAX	No./100 ml		1/day	Grab
Nitrate as N	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report Daily Max	mg/L		2/month	24-Hr Composite
Nitrite as N	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report Daily Max	mg/L		2/month	24-Hr Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).		TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PRIMARY FACILITY NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103 A-2	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: August 1, 2017
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017
___ Check Here if No Discharge
NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Total Kjeldahl Nitrogen	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	XXX	mg/L		2/month	24-Hr Composite
Cadmium, Total	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	XXX	mg/L		1/month	24-Hr Composite
Cyanide, Total	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	XXX	mg/L		1/month	24-Hr Composite
Lead, Total	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	XXX	mg/L		1/month	24-Hr Composite
Zinc, Total	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	XXX	mg/L		1/month	24-Hr Composite
Chlorodibromomethane	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	XXX	mg/L		1/month	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).		TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PRIMARY FACILITY NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103 A-2	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: August 1, 2017
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Dichlorobromomethane	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	XXX	mg/L		1/month	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).		TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PRIMARY FACILITY NAME/ADDRESS

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103	028
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Annually
DMR Effective From: August 1, 2017
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
pH	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	XXX	Report Daily Max	S.U.		1/year	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	XXX	Report Daily Max	mg/L		1/year	Grab
Chemical Oxygen Demand (COD)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	XXX	Report Daily Max	mg/L		1/year	Grab
Total Suspended Solids	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	XXX	Report Daily Max	mg/L		1/year	Grab
Oil and Grease	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	XXX	Report Daily Max	mg/L		1/year	Grab
Total Kjeldahl Nitrogen	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	XXX	Report Daily Max	mg/L		1/year	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).		TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

PRIMARY FACILITY NAME/ADDRESS

NAME DELCORA STP
CLIENT DELCORA
ADDRESS 100 East Fifth Street
Chester, PA 19016-0999
LOCATION Chester City
Delaware County
WATERSHED 3-G

PA0027103	028
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Annually
DMR Effective From: August 1, 2017
DMR Effective To: April 30, 2018
Permit Expires: April 30, 2018
Permit Application Due: November 1, 2017

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Total Phosphorus	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	XXX	Report Daily Max	mg/L		1/year	Grab
Iron, Dissolved	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	XXX	Report Daily Max	mg/L		1/year	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).		TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

Supplemental Form Inventory

The following supplemental forms (indicated in the check box column) are attached to this permit and must be completed and submitted to DEP in accordance with the permit and the supplemental form instructions. If the eDMR system is used to submit DMR reports, the spreadsheet versions of these supplemental forms, where applicable, should be used and attached to the eDMR submissions. A link to DEP's supplemental form website is available when logging into the eDMR system.

Check Box	Supplemental Form Name and No.
☒	Daily Effluent Monitoring (3800-FM-BPNPSM0435)
☒	Influent & Process Control (3800-FM-BPNPSM0436)
☒	Hauled in Municipal Wastes (3800-FM-BPNPSM0437)
☒	Sewage Sludge/Biosolids Production and Disposal (3800-FM-BPNPSM0438)
☐	Chemical Additives Usage (3800-FM-BPNPSM0439)
☒	Non-Compliance Reporting Form (3800-FM-BPNPSM0440)
☒	CSO Monthly Summary Report (3800-FM-BPNPSM0441)
☒	CSO Detailed Report (3800-FM-BPNPSM0442)
☐	Groundwater Monitoring Data Report (3800-FM-BPNPSM0443)
☐	Nutrient Monitoring (3800-FM-BPNPSM0444)
☐	Nitrogen Budget (3800-FM-BPNPSM0445)
☐	Phosphorus Budget (3800-FM-BPNPSM0446)
☐	Annual Nutrient Summary (3800-FM-BPNPSM0447)
☐	TMDL Annual Load Summary (3800-FM-BPNPSM0448)
☐	Land Application Systems (3800-FM-BPNPSM0449)
☒	Hauled in Residual Wastes (3800-FM-BPNPSM0450)
☐	Surface Water Monitoring Data Report (3800-FM-BPNPSM0461)
☒	Lab Accreditation Form (3800-FM-BPNPSM0189)
☒	Storm Water Annual Inspection Form (3800-PM-WSFR0083v)
☒	Storm Water Additional Information (3800-PM-WSFR0083t)
☐	Other:

3800-FM-WSFR0435 7/2009

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
DAILY EFFLUENT MONITORING

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G
Laboratories: _____

Month: _____ Year: _____
NPDES Permit No.: PA0027103 A-2 Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	Effluent Parameters																	
	Flow		pH		TRC		CBOD5		CBOD20 % Removal		TSS		Total Dissolved Solids		Oil and Grease		Fecal Coliform	
	Q	*MGD*	Q	*S.U.*	Q	*mg/L*	Q	*mg/L*	Q	*%*	Q	*mg/L*	Q	*mg/L*	Q	*mg/L*	Q	*No./100 ml*
1																		
2																		
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Avg																		

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____
Title: _____ Date: _____

3800-FM-WSFR0435 7/2009

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
DAILY EFFLUENT MONITORING

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G
Laboratories:

Month: Year:
NPDES Permit No.: PA0027103 A-2 Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on

Day	Effluent Parameters																	
	Ammonia		Nitrate		Nitrite		TKN		Total Cadmium		Total Copper		Total Cyanide		Total Lead		Total Zinc	
	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L
1																		
2																		
3																		
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29																		
30																		
31																		
Avg																		

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Prepared By: Signature:
Title: Date:

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
DAILY EFFLUENT MONITORING

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G
Laboratories:

Month: Year:
NPDES Permit No.: PA0027103 A-2 Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on

Day	Effluent Parameters																	
	Chlorodibromo-methane		Dichlorobromo-methane		PCBs (Dry Weather)		PCBs (Wet Weather)		CBOD20									
	Q	*mg/L*	Q	*mg/L*	Q	*pg/L*	Q	*pg/L*	Q	*lbs/day*	Q		Q		Q		Q	
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2																		
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30																		
31																		
Avg																		

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Signature:
Title: Date:

INSTRUCTIONS FOR COMPLETING DAILY EFFLUENT MONITORING SUPPLEMENTAL REPORT

Use this form to report daily monitoring results for the parameters that must be monitored in effluent for compliance with the permit. Results for influent parameters should be reported on Form 3800-FM-WSFR0436.

1. Enter Facility Name, Municipality, County, Watershed No., Laboratories, Month, Year, NPDES Permit No., Outfall No., and Permit Expiration Date (it is noted that this information may be pre-populated if you have received this form with your permit). For Laboratories, list the names of all laboratories where samples were analyzed during the month, including on-site analysis.

2. In the column headers, below "Effluent Parameters," enter the names of parameters in the permit. Since limited space is provided, abbreviation may be necessary. If there are more parameters for an outfall than columns provided on the form, attach an additional sheet.

3. Below parameter names, and to the right of "Q" (Qualifier) column headers, enter the units associated each parameter (it is noted that this information may be pre-populated if you have received this form with your permit).

4. Enter monitoring results for parameters in the rows corresponding to the day of the month in which samples were collected. Enter results exactly as reported by the laboratory, or if measured with on-site equipment, to the level of precision recommended by the equipment manufacturer. Enter data qualifiers such as "<," ">," "J," and others in the "Q" column.

5. Calculate and report average values at the bottom of the table in accordance with the DMR Instructions (3800-FM-WSFR0463). Note – for bacteria, calculate and report the geometric mean value.

6. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0436 Rev. 8/2011

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT – INFLUENT & PROCESS CONTROL

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103 A-2
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	Influent					Process Control				
	Flow (MGD)	BOD5 (mg/l)	BOD5 (lbs)	TSS (mg/l)	TSS (lbs)	Aeration MLSS (mg/l)	Aeration DO (mg/l)	Sludge Wasted (gallons)		
1										
2										
3										
4										
5										
6										
7										
8										
9										
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Avg										
Max										

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

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INSTRUCTIONS FOR COMPLETING INFLUENT & PROCESS CONTROL SUPPLEMENTAL REPORT

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. For **Influent**, enter daily average Influent Flow (MGD) (if an influent flow meter is in use), daily influent BOD_5 or BOD_5 concentrations (mg/l) and loads (lbs), and daily influent TSS concentrations (mg/l) and loads (lbs). Calculate loads by multiplying daily average flow (MGD) by daily average concentration (mg/l) and a conversion factor of 8.34. If an influent flow meter is not in use, you may use results from an effluent flow meter.

3. For **Process Control**, enter daily average Mixed Liquor Suspended Solids (MLSS) (mg/l) and daily average Aeration Dissolved Oxygen (DO) for aerobic biological treatment systems, and total daily Sludge Wasted (removed from biological treatment), in gallons, for all treatment system types. If a parameter does not apply to your facility, leave the column blank. Information for other parameters such as Return Activated Sludge (RAS) Rate, Recirculation Rate (for fixed media treatment systems), Sludge Blanket Thickness, Sludge Volume Index, and others may be requested by the DEP office that issued the permit.

4. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0437 8/2009

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT – HAULED IN MUNICIPAL WASTES

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103 A-2
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	SEPTAGE				SLUDGE				OTHER (specify):				DAILY TOTALS	
	Gallons	BOD_5 (mg/l)	BOD_5 (lbs)	Disposal Location	Gallons	BOD_5 (mg/l)	BOD_5 (lbs)	Disposal Location	Gallons	BOD_5 (mg/l)	BOD_5 (lbs)	Disposal Location	Gallons	BOD_5 (lbs)
1														
2														
3														
4														
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Avg												Monthly Totals:		

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

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INSTRUCTIONS FOR COMPLETING HAULED IN MUNICIPAL WASTES SUPPLEMENTAL REPORT

This form is intended for documenting the receipt of municipal wastes including sewage sludge, septage and other wastewaters hauled in from other facilities for processing and/or disposal at your facility. This form should not be used for reporting receipt of residual wastes (e.g., food processing wastes, oil and gas wastewater, landfill leachate, etc.) - please use Form 3800-FM-WSFR0450 for reporting this information.

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. For septage, sludge and other wastewaters (specify type in the space provided), record the daily volume received in gallons, the daily BOD_5 concentration (average), the daily BOD_5 load in lbs (average), and the disposal location. For disposal location, specify the plant location or tank receiving hauled in wastes (e.g., headworks, primarily clarifier, digester, etc.).

3. Determine daily BOD_5 concentrations in mg/l by sampling loads in accordance with the permit or otherwise as determined by the facility. Periodic sampling of loads is encouraged to improve confidence in reported results.

4. Calculate the average, daily total and monthly total values and report the values in the spaces provided.

5. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0438 Rev. 7/2010

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
SEWAGE SLUDGE / BIOSOLIDS PRODUCTION AND DISPOSAL

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103 A-2
Renewal application due **180 days** prior to expiration
This permit will expire on _____

SEWAGE SLUDGE/BIOSOLIDS PRODUCTION INFORMATION (Identify each off-site removal event and incineration event)

☐ Check here if there were no off-site removal events during the month

Date	Liquid Sewage Sludge/Biosolids Hauled Off-site			Dewatered Sewage Sludge/Biosolids Hauled Off-site			Sewage Sludge/Biosolids Dewatered and Incinerated On-site		
	Gallons	% Solids	Dry Tons	Tons Dewatered	% Solids	Dry Tons	Tons Dewatered	% Solids	Dry Tons
		TOTAL:			TOTAL:			TOTAL:	

SEWAGE SLUDGE/BIOSOLIDS AND INCINERATOR ASH DISPOSAL AND BENEFICIAL USE INFORMATION
(Identify all sites where sewage sludge/biosolids or ash were disposed or land applied)

Site Name				
Municipality				
County				
DEP Permit No.				
Type of Material*				
Dry Tons Applied/Disposed				
Type of Disposal/Use*				
Hauler Name				

*See Instructions for explanation

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

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INSTRUCTIONS FOR COMPLETING SEWAGE SLUDGE / BIOSOLIDS SUPPLEMENTAL REPORT

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

Biosolids Production Information

2. For each off-site removal event for liquid sewage sludge or biosolids and for dewatered sewage sludge or biosolids, and for each event where dewatered sewage sludge or biosolids are incinerated on-site, list the date of the event, identify the gallons (liquid) or tons (dewatered) removed or incinerated and the percent solids (e.g., 10%, 20%, etc.) Report only sewage sludge or biosolids that have been removed from the plant digesters and other solids which have been **permanently** removed from the treatment process. Do **not** include sewage sludge or biosolids from other facilities that are processed at your facility. (If there were no off-site removal events during the month, check the box above the table).

   Calculate dry tons for liquid sewage sludge or biosolids by multiplying the volume (gallons) by the percent solids and by a conversion factor of 0.0000417. For example, if 2,500 gallons of liquid biosolids is removed, and the percent solids is 3.0%, dry tons is calculated as:

   2,500 gallons x 3.0% x 0.0000417 = 0.31 dry tons

   Calculate dry tons for dewatered sewage sludge or biosolids by multiplying the tons dewatered by the percent solids and by a conversion factor of 0.01. For example, if 5 tons of dewatered biosolids is removed, and the percent solids is 50%, dry tons is calculated as:

   5 tons x 50% x 0.01 = 2.5 dry tons

   The **% Solids** of liquid or dewatered sewage sludge or biosolids must be determined periodically through laboratory testing. Do not estimate or guess this value. An acceptable test method is method 2540B in *Standard Methods for the Examination of Water and Wastewater*, 18th edition, where samples are dried at 103-105°C. Other references such as ASTM may have equivalent tests which are also acceptable.

Biosolids and Incinerator Ash Disposal and Beneficial Use Information

3. Report sewage sludge, biosolids, and ash disposal and beneficial use information by disposal/application site. There are columns for four possible sites per month - if more sites are needed, attach additional pages. For each Site Name, listed at the top of the column, enter the Municipality and County of the site, the DEP Permit No. (i.e., Biosolids permit number for land application, landfill waste management permit number, etc.), Type of Material (sewage sludge, biosolids, or incinerator ash), Dry Tons Applied/Disposed at the site for the month, Type of Disposal/Use (e.g., reed beds, agricultural utilization, composting, landfill, other treatment plant, etc.) and the name of the hauler (company or individual name).

4. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0440 Rev. 7/2010

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

NON-COMPLIANCE REPORTING FORM

Use this supplemental form to report all permit violations and any other non-compliance that may endanger health or the environment, in accordance with your permit. Complete all sections that apply. If you are reporting violations of permit limits, monitoring requirements or schedules that do not pose an immediate threat to health or the environment, you may attach this form to the Discharge Monitoring Report (DMR). **Title 25, Pa. Code §§ 91.33 and 91.34 (regarding incidents causing or threatening pollution and activities utilizing pollutants, respectively), in part requires immediate notification by telephone to the Department of pollution incidents, remediation, and may require an additional report on the incident or plan of pollution prevention measures.** If you are reporting other non-compliance events, and the reporting deadline does not coincide with your submission of the DMR, it should be submitted separately to the Department by the reporting deadline set forth in the permit. See instructions for more information.

Facility Name: DELCORA STP Month: _____ Year: _____

Municipality: City of Chester County: Delaware Permit No.: PA0027103 A-2

☐ **Violations of Permit Effluent Limitations***

Date	Parameter	Permit Limit	Units	Statistical Code	Result	Units	Cause of Violation	Corrective Action Taken

☐ **Sanitary Sewer Overflows and Other Unauthorized Discharges***

Event Date	Substance Discharged	Location	Volume (gals)	Duration (hrs)	Receiving Waters	Impact on Waters	Cause of Discharge	Date DEP Notified

☐ **Other Permit Violations***

☐ Sample collection less frequent than required Explain _____
☐ Sample type not in compliance with permit Explain _____
☐ Violation of permit schedule Explain _____
☐ Other Explain _____
☐ Other Explain _____

*** If the space provided is not sufficient to record all information, please attach additional sheets.**

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

INSTRUCTIONS FOR COMPLETING NON-COMPLIANCE REPORTING FORM

Use this supplemental form to report all permit violations and any other non-compliance that may endanger health or the environment, in accordance with your permit. Complete all sections that apply. If you are reporting violations of permit limits, monitoring requirements or schedules that do not pose an immediate threat to health or the environment, you may attach this form to the Discharge Monitoring Report (DMR). If you are reporting other non-compliance events, and the deadline for a written report (e.g., 5 days) does not coincide with your submission of the DMR, this form should be submitted separately to the Department by the reporting deadline set forth in the permit.

If you are unsure of whether an incident constitutes non-compliance that may endanger health or the environment, it is recommended that you notify the Department verbally as soon as possible after you become aware of the incident. Title 25, Pa. Code §§ 91.33 and 91.34 (regarding incidents causing or threatening pollution and activities utilizing pollutants, respectively), in part requires immediate notification by telephone to the Department of pollution incidents, remediation, and may require an additional report on the incident or plan of pollution prevention measures.

Instructions:

1. Enter the name of the facility, the municipality and county where it is located, the month and year when violations occurred, and the NPDES or WQM permit number for the facility.

2. If there were violations of permit effluent limitations during the month, check the box next to "Violations of Permit Effluent Limitations." (Note – if using the electronic version of this form, check the boxes first, and then select Tools – Unprotect Document to enter additional information). Enter the date of the violation (if a violation of a minimum or maximum limit, the date of sample collection, or if a violation of an average limit, the end of the monitoring period), the parameter name, the permit limit and units, the statistical code (e.g., "MIN", "MAX", "MO AVG", etc.), the measured result and units, the cause of the violation and the corrective action taken. **If there are more than two violations during the monitoring period and/or if the space provided is insufficient to explain the cause or corrective action, please attach additional pages.**

3. If there are Sanitary Sewer Overflow (SSO) discharges or other unauthorized discharges from the facility (e.g., spills, leaks, etc.) that enter or have the potential to enter waters of the Commonwealth, including groundwater, notify DEP by phone as soon as possible, and document the discharge on this form by checking the box next to "Sanitary Sewer Overflows and Other Unauthorized Discharges." Record the event (discharge) date, the substance discharged (e.g., sewage, on-site chemicals, etc.), the location where the discharge occurred (e.g., manhole number, pump station name, equipment description, etc.), the volume discharged (gallons), the approximate duration of the discharge (hours), the receiving waters (name of stream or groundwater), the impact on the receiving waters, if observed (e.g., solids deposition, foam, fish kill, etc.), the cause of the discharge, and the date on which the Department was verbally notified. **If there are more than two discharge events during the monitoring period and/or if the space provided is insufficient to explain the discharge, please attach additional pages.**

4. If there are other violations of the permit, check the box next to "Other Permit Violations," and check the appropriate box that describes the violation type. If not identified on the form, check the box next to "Other" and provide a written explanation. **If the space provided is insufficient to explain the violation, please attach additional pages.**

5. Type your name and title and sign and date the form after reading the certification statement.

If you have questions about completing this form, contact the Water Management Operations Section of the Department in your region:

Southeast Region – (484) 250-5970
Northeast Region – (570) 826-2553
Southcentral Region – (717) 705-4707
Northcentral Region – (570) 327-3661
Southwest Region – (412) 442-4000
Northwest Region – (814) 332-6942

3800-FM-WSFR0441 7/2009

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103 A-2
Renewal application due **180 days** prior to expiration
This permit will expire on _____

CSO Outfall No.	Outfall Location*	Discharge?*	Comments

*See *instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

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INSTRUCTIONS FOR COMPLETING CSO MONTHLY INSPECTION SUPPLEMENTAL REPORT

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. List all CSO outfalls associated with the facility, as listed in the NPDES permit, in the column labeled "CSO Outfall No.," using additional sheets as needed.

3. Specify the location of the CSO (e.g., street or other identification information) in the column labeled "Outfall Location."

4. In the column labeled "Discharge?" enter "Yes" or "No" for each outfall to report whether a discharge was identified at any time during the calendar month. **If you respond Yes for any outfall, a separate "Detailed Outfall Report" must be submitted for that outfall.**

5. Add any additional outfall-specific information as needed in the "Comments" column.

6. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0442 7/2009

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

CSO SUPPLEMENTAL REPORT
DETAILED OUTFALL REPORT

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: _____ Year: _____
NPDES Permit No.: PA0027103 A-1 Outfall No. _____
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	Identification*	Discharge Volume (MG)*	Duration (hrs)	Cause*	Precipitation (in)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
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**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for Knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

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INSTRUCTIONS FOR COMPLETING CSO DETAILED OUTFALL SUPPLEMENTAL REPORT

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., CSO Outfall No., and Permit Expiration Date.

2. Explain how the discharge was identified (e.g., inspection, complaint, alarm) in the column labeled "Identification."

3. In the column labeled "Discharge Volume," specify the volume of the discharge in million gallons, and (in parentheses) identify the method used to determine the volume by selecting one of the following codes:

   O = Observed duration and rate of flow to approximate overflow volume.
   C = Calculated overflow volume utilizing a model or empirical analysis.
   M = Measured overflow volume from data collected by a calibrated flow monitor.
   U = Unable to determine.

4. In the column labeled "Duration (hrs)," specify the total discharge period. If you estimate the discharge period, explain how you arrived at the estimate in the Comments column.

5. In the column labeled "Cause," identify the cause of the overflow (e.g., line or gate blockage, malfunction, hydraulic load).

6. In the column labeled "Precipitation," report the total precipitation for the day, in inches (in), as measured using an on-site rain gauge, or use local airport data.

7. Add any additional outfall-specific information as needed in the "Comments" column.

8. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0450 1/2010

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
HAULED IN RESIDUAL WASTES

Facility Name: DELCORA STP
Municipality: City of Chester County: Delaware
Watershed: 3-G

Month: ____________ Year: ____________
NPDES Permit No.: PA0027103 A-2
Renewal application due **180 days** prior to expiration
This permit will expire on ____________

Date	Volume Received *(gallons)*	License Plate No.	Well Permit No.	Source of Residual Waste			Wastewater Type	Chemical Analysis *(Yes/No)*
				Generator	*Address*	*State*		
Total:								

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Prepared By: ____________ Signature: ____________
Title: ____________ Date: ____________

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

INSTRUCTIONS FOR COMPLETING HAULED IN RESIDUAL WASTES SUPPLEMENTAL REPORT

Use this form to document receipt of residual wastes at your treatment facility (e.g., food processing waste, landfill leachate, oil and gas wastewaters). Municipal wastes such as sewage sludge and septage should be documented on the Hauled in Municipal Wastes Supplemental Report (3800-FM-WSFR0437).

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. Enter the date for each day in which the facility receives residual wastes. If wastewater is received from more than one generator on the same day, repeat the date in a separate row.

3. Report the total volume received each day from each generator (source), in whole gallons.

4. Report the license plate number of the vehicle hauling the wastewater to the treatment facility. If more than one vehicle is used by a generator, report the date and total volume hauled by each vehicle daily (use separate rows as necessary).

5. For oil and gas wastewaters, enter the permit number of the well from which the wastewater was generated. For other wastewaters, this column may remain blank.

6. Report the source of each load of residual waste, including the generator name, address, and state. For oil and gas wastewaters, report the location of the well(s) generating the wastewater.

7. Enter Wastewater Type, typically frac water, drilling fluids or production water for oil and gas wastewaters, or other types such as food processing waste or leachate.

8. If the wastewater has been analyzed and reported on a Residual Waste Form 26R, or a separate waste characterization using the parameters from Form 26R, enter "Yes" under the column "Chemical Analysis", otherwise enter "No".

9. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

3800-FM-WSFR0189 3/2009

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL LABORATORY ACCREDITATION FORM[1]

Permittee Name: DELCORA

Address: 100 East Fifth Street
Chester, PA 19016-0999

PERMIT NUMBER	MONITORING PERIOD Year/Month/Day						
PA0027103 A-2				TO			

PARAMETER	ANALYSIS METHOD	LAB NAME	LAB ID NUMBER[2]

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibly of fine and imprisonment for knowing violations.

Name/Title Principal Executive Officer **Phone:** _____ **Signature of Principal Executive Officer or Authorized Agent**

_____ **Date:** _____ _____

[1] Submit this form with the first Discharge Monitoring Report (DMR), Annual Report or Recordkeeping and Reporting Form, where sample results are submitted to the Department for compliance purposes. You do not need to send this form to the Department again UNLESS there has been a change to the lab or method of analysis.

[2] For parameter(s) covered under accreditation-by-rule, submit the lab's registration number in lieu of an accreditation number.

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ANNUAL INSPECTION FORM FOR NPDES PERMITS FOR DISCHARGES OF STORMWATER ASSOCIATED WITH INDUSTRIAL ACTIVITIES

1. Date of Inspection _____

3. NPDES Permit # PA0027103 A-2

2. Facility Owner/Operator Name and Address:
DELCORA
100 E 5th Street, PO Box 999
Chester, PA 19013-4508
Tel: (610) 876-5523 Fax: _____

4. Facility Address and Location
Street 3201 W Front Street, Chester, PA 19013-2320
Municipality City of Chester County Delaware

VISUAL INSPECTION

Provide the following information for the storm event

5. Duration _____

6. Estimation of rainfall (in inches) † _____

† The annual inspection should be conducted after a storm event that is greater than 0.1 inches in magnitude and that occurred at least 72 hours from the previous 0.1 inch storm event.

7. Estimate the time between the previous raln event _____

8. Estimate the total volume (in gallons) for each outfall and report it in item 9.
Volume = C x I A,
where C is the runoff coefficient (i.e, 0.9 for paved and 0.5 for unpaved)
I is the rainfall amount (in ft), and
A is the area (square feet) drained to the outfall inspected
(convert from cubic feet to gallons by multiplying by 7.481).

9. Estimate the size of the drainage area (in square feet) for each outfall.

Outfall #	Drainage Area	% Paved	% Unpaved	Volume in gallons

Complete the following information for each outfall inspected (items 10 through 15)

VISUAL INSPECTION OF OUTFALL NUMBER

10. Description of area(s) that drains to outfall. _____

11. Description of stormwater management practices, erosion and sedimentation control practices, and other structural control measures that are in place to control pollutants from running off-site.

12. Is there visible flow from the pipe? ☐ Yes ☐ No (Go to number 14) Pipe Dia. (inches) _____
    a. ODOR: Chemical Musty Sewage Rotten Eggs Other _____
    b. COLOR: Clear Red Yellow Brown Other _____
    c. CLARITY: Clear Cloudy Opaque Suspended Solids Other _____
    d. FLOATABLES: Suds Oily Film Garbage Sewage Other _____
    e. DEPOSITS/STAINS: None Oily Sediment Other _____
    f. VEGETATION: None Normal Excessive Inhibited Other _____

13. Is there standing water present? ☐ Yes ☐ No (Go to number 16)
    a. ODOR: Chemical Musty Sewage Rotten Eggs Other _____
    b. COLOR: Clear Red Yellow Brown Other _____
    c. CLARITY: Clear Cloudy Opaque Suspended Solids Other _____
    d. FLOATABLES: Suds Oily Film Garbage Sewage Other _____
    e. DEPOSITS/STAINS: None Oily Sediment Other _____
    f. VEGETATION: None Normal Excessive Inhibited Other _____

14. Is there any evidence of or potential for any pollutant being discharged at this outfall? ☐ Yes ☐ No
    Describe:

    If yes, identify substances present in the sediment (if possible).

15. Description of corrective measures taken or planned to remove sediments or debris if found during inspection. Please provide a schedule if actions are planned.

COMPREHENSIVE SITE COMPLIANCE EVALUATION

16. Do drainage maps reflect current conditions? ☐ Yes ☐ No

If no, provide your comments.
Comments: _____

17. Based on review of PPC Plan (including Housekeeping Measures), are any changes, corrections or updates necessary? ☐ Yes ☐ No

If yes, provide your comments.
Comments: _____

18. Have you inspected all structural stormwater controls used to implement the PPC Plan to determine if they are adequate? ☐ Yes ☐ No

If no, provide your comments.
Comments: _____

19. Have you inspected the entire site to determine if erosion and sedimentation control measures are adequate? ☐ Yes ☐ No

If no, provide your comments.
Comments: _____

20. Summarize corrective actions/measures completed or planned to correct any deficiencies found as a result of the inspection. Please provide a schedule if actions are planned.

_____

21. Signature of Inspector

Name of Inspector: _____

Date Report Prepared: _____

Signature of Inspector: _____

22. Signature of Owner/Operator of Facility

_____ _____ _____

Name/Title Principal Executive Officer Signature Date

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 Pa. C.S. §4904 (relating to unsworn falsification).

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BUREAU OF WATER STANDARDS AND FACILITY REGULATION

ANNUAL INSPECTION FORM FOR NPDES PERMITS FOR DISCHARGES OF STORMWATER ASSOCIATED WITH INDUSTRIAL ACTIVITIES

Who May Use This Form

This form is to be used by all PAG-03 permit holders to comply with the (1) annual inspection requirement in Section A.2.b.(1) concerning Appendix J facilities, and (2) Comprehensive Site Compliance Evaluation and Record Keeping requirement in Section C.3.c. of the General Permit. This form may also be used for facilities with individual NPDES permits.

Completing the Form

One form must be completed for each facility or site. Please address all applicable questions and provide documentation to support the responses.

Permittees required to comply with Appendix J of the General Permit are eligible to conduct an Annual Inspection in lieu of monitoring. The Annual Inspection shall include visual inspection of all outfalls and a Comprehensive Site Compliance Evaluation. Complete items 10 through 15 for each outfall inspected. Where possible, visual inspection shall identify substances present in the sediment. The Annual Inspection/Certification must identify area(s) contributing pollutant(s) to stormwater discharge(s) and evaluate whether measures to reduce pollutant loadings identified in the PPC Plan are adequate and properly implemented in accordance with terms of the General Permit or whether additional control measures are necessary. Any deficiencies found during the inspection are to be corrected promptly in accordance with Part C.3.c.(2) of the General Permit.

Permittees that need to comply with requirements other than Appendix J of the General Permit must use this form to comply with Comprehensive Site Evaluation and Recordkeeping requirement of the General Permit.

Where to File This Form

When an annual inspection is conducted in lieu of monitoring, the permittee shall submit a completed and signed Annual Inspection Form, postmarked no later than 28 days after completion of the inspection to the appropriate DEP regional office. All other permittees shall retain the completed and signed form as part of the PPC Plan.

3800-PM-WSFR0083t Rev. 11/2010
Additional Information

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BUREAU OF WATER STANDARDS AND FACILITY REGULATION

ADDITIONAL INFORMATION
FOR THE REPORTING OF STORM WATER DISCHARGE MONITORING

(This form must be completed and submitted with the DMR form for <u>each</u> outfall sampled)

A. PERMITTEE'S NAME	OUTFALL/DISCHARGE NO.
DELCORA	
FACILITY/LOCATION DELCORA STP, Chester City, Delaware County	

B. SAMPLED STORM EVENT

Provide the date of storm event:	Provide the duration (in hours) of storm event:
Estimate rainfall measurements (in inches) of the storm which generated the sample runoff:	Estimate the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch) storm event:

Drainage area and volume of runoff:

(1) Paved area _____ square feet x 0.9 (estimated runoff coefficient) x rainfall _____ inches x 0.6234 = _____ gallons
(2) Unpaved area _____ square feet x 0.5 (estimated runoff coefficient) x rainfall _____ inches x 0.6234 = _____ gallons

Total area _____ square feet Total volume of discharge _____ gallons

C. GRAB SAMPLE METHODOLOGY

If a grab sample during the first 30 minutes of the discharge was impracticable, and the sample was instead taken during the first hour of the discharge, describe the circumstances:

D. SAMPLE WAIVER

If samples could not be collected due to adverse climactic conditions, describe why samples could not be collected. Attach available documentation of the event.

If monitoring data submitted is being used to represent other substantially identical outfalls, summarize on a separate sheet the drainage area and volume of runoff under item B. above for each outfall.

Whole Effluent Toxicity Report
NPDES Permit No. PA0027103 A-2

Permittee Name: DELCORA
Municipality: City of Chester
County: Delaware

Species Name End Points:	Ceriodaphnia dubia (Cladoceran) Survival	Ceriodaphnia dubia (Cladoceran) Reproduction	Pimephales promelas (fathead minnow) Survival	Pimephales promelas (fathead minnow) Growth
NOEC (%)				
TUc				
IC_{25}				
PMSD				
TUa				
LC_{50} (48-hour)				
LC_{50} (96-hour)				

7. OPERATING EXPENSES

DELAWARE COUNTY REGIONAL
WATER QUALITY CONTROL AUTHORITY
2019 BUDGET

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DELAWARE COUNTY REGIONAL
WATER QUALITY CONTROL AUTHORITY

2019 BUDGET

RATES AND CHARGES- WESTERN

	PROJECTED FLOW IN MM GALLONS		% Change	RATE 1,000 Gallons/ or Charge Per Minimum		% Change	Total Revenue		% Change	$ Change
	2018	2019		2018	2019		2018	2019		
Retail:										
Chester City	831,687	823,028	-1.04%	$4.93	$5.32	7.91%	$4,100,217	$4,378,509	6.79%	$278,292
Parkside	43,033	43,296	0.61%	$4.93	$5.32	7.91%	$212,153	$230,335	8.57%	$18,182
Upland	139,838	133,520	-4.52%	$4.93	$5.32	7.91%	$689,401	$710,326	3.04%	$20,925
Chester Twp.	35,353	35,612	0.73%	$4.93	$5.32	7.91%	$174,290	$189,456	8.70%	$15,166
Trainer	36,836	39,982	8.54%	$9.65	$5.32	-44.87%	$355,467	$212,704	-40.16%	-$142,763
Marcus Hook	45,260	44,779	-1.06%	$7.53	$8.13	7.97%	$340,808	$364,053	6.82%	$23,245
Minimums # of accounts	3,873	3,873	0.00%	$95.00	$99.75	5.00%	$367,935	$386,332	5.00%	$18,397
TOTAL	1,135,880	1,124,090	-1.04%				$6,240,271	$6,471,715	3.71%	$231,444
Retail Industrial: (1)										
Exelon	1,399	1,643	17.44%	$5.94	$6.42	8.08%	$8,310	$10,548	26.93%	$2,238
Ace Linen	13,500	16,000	18.52%	$5.94	$6.42	8.08%	$80,190	$102,720	28.10%	$22,530
PQ	20,000	20,000	0.00%	$5.94	$6.42	8.08%	$118,800	$128,400	8.08%	$9,600
Delco Linens	9,500	8,350	-12.11%	$5.94	$6.42	8.08%	$56,430	$53,607	-5.00%	-$2,823
Covanta	865	1,027	18.73%	$5.94	$6.42	8.08%	$5,138	$6,593	28.32%	$1,455
Congoleum	4,055	4,400	8.51%	$10.64	$6.42	-39.66%	$43,145	$28,248	-34.53%	-$14,897
Monroe - Sanitary	7,500	6,000	-20.00%	$10.64	$6.42	-39.66%	$79,800	$38,520	-51.73%	-$41,280
TOTAL	56,819	57,420	1.06%				$391,813	$368,636	-5.92%	-$23,177
Wholesale										
EDU:										
Brookhaven	252,915	270,146	6.81%	$2.48	$2.68	8.06%	$627,229	$723,991	15.43%	$96,762
Nether Providence	340,918	382,346	12.15%	$2.48	$2.68	8.06%	$845,477	$1,024,687	21.20%	$179,211
TOTAL	593,833	652,492	9.88%				$1,472,706	$1,748,679	18.74%	$275,973
WESTERN:										
Southern	803,000	803,000	0.00%	$2.46	$2.66	8.13%	$1,975,380	$2,135,980	8.13%	$160,600
Soccer Stadium	4,650	4,650	0.00%	$2.46	$2.66	8.13%	$11,439	$12,369	8.13%	$930
Eddystone	146,000	146,000	0.00%	$2.46	$2.66	8.13%	$359,160	$388,360	8.13%	$29,200
Boeing	45,625	45,625	0.00%	$2.46	$2.66	8.13%	$112,238	$121,363	8.13%	$9,125
Harrah's Racino	21,000	21,000	0.00%	$2.46	$2.66	8.13%	$51,660	$55,860	8.13%	$4,200
Lower Chichester	182,500	182,500	0.00%	$2.46	$2.66	8.13%	$448,950	$485,450	8.13%	$36,500
TOTAL	1,202,775	1,202,775	0.00%				$2,958,827	$3,199,382	8.13%	$240,555
Wholesale Industrial: (1)										
Kimberly Clark	1,368,750	1,368,750	0.00%	$2.72	$2.94	8.09%	$3,723,000	$4,024,125	8.09%	$301,125
Sunoco	1,131,500	1,058,500	-6.45%	$2.72	$2.94	8.09%	$3,077,680	$3,111,990	1.11%	$34,310
Braskem	71,600	76,000	6.15%	$2.72	$2.94	8.09%	$194,752	$223,440	14.73%	$28,688
Dynegy (Liberty Electric)	145,200	121,500	-16.32%	$2.72	$2.94	8.09%	$394,944	$357,210	-9.55%	-$37,734
Monroe-Process	51,100	51,100	0.00%	$2.72	$2.94	8.09%	$138,992	$150,234	8.09%	$11,242
Marcus Hook Energy (FPL)	116,400	116,400	0.00%	$2.72	$2.94	8.09%	$316,608	$342,216	8.09%	$25,608
TOTAL	2,884,550	2,792,250	-3.20%				$7,845,976	$8,209,215	4.63%	$363,239
Chester Ridley Creek										
Southwest Authority	867,970	897,900	3.45%	$3.00	$3.24	8.00%	$2,603,910	$2,909,196	11.72%	$305,286
Middletown	628,530	598,600	-4.76%	$3.00	$3.24	8.00%	$1,885,590	$1,939,464	2.86%	$53,874
Total	1,496,500	1,496,500	0.00%				$4,489,500	$4,848,660	8.00%	$359,160
Total West	7,370,357	7,325,527	-0.61%				$23,399,093	$24,846,287	6.18%	$1,447,194

(1) Plus excess BOD/TSS surcharge at $.32/LB and $.285/LB respectively. Delcora has a surcharge for BOD and TSS over 300 MG\L. Permit Industries at times send Delcora an excess of this amount, which may result in a surcharge amount.

DELAWARE COUNTY REGIONAL
WATER QUALITY CONTROL AUTHORITY
2019 BUDGET

RATES AND CHARGES- Eastern

	PROJECTED FLOW IN MM GALLONS		% Change	RATE Per 000 Gallons		% Change	Total Revenue		% Change	$ Change
	2018 Budget	2019 Budget		2018 Budget	2019 Budget		2018 Budget	2019 Budget		
Eastern Authority										
Central Delaware County Authority	3,923,750	3,832,500	-2.33%	$2.32	$2.51	8.19%	$9,103,100	$9,619,575	5.67%	$516,475
Darby Creek Joint Authority	7,665,000	7,482,500	-2.38%	$2.32	$2.51	8.19%	$17,782,800	$18,781,075	5.61%	$998,275
Muckinipates Authority	1,825,000	1,733,750	-5.00%	$2.32	$2.51	8.19%	$4,234,000	$4,351,713	2.78%	$117,713
TOTAL	13,413,750	13,048,750	-2.72%				$31,119,900	$32,752,363	5.25%	$1,632,463

RATES AND CHARGES- Other Residential

	Number of EDU's/ 000 Gallons		% Change	RATE Per EDU/ 000 Gallons		% Change	Total Revenue		% Change	$ Change
	2018 Budget	2019 Budget		2018 Budget	2019 Budget		2018 Budget	2019 Budget		
Rose Valley Pump Station										
Rose Valley Residents	373	373	0.00%	$625.00	$900.00	44.00%	$233,125	$335,700	44.00%	$102,575
Nether Providence Residents	127	127	0.00%	$625.00	$900.00	44.00%	$79,375	$114,300	44.00%	$34,925
Total Rose Valley Pump Station	500	500	0.00%				$312,500	$450,000	44.00%	$137,500
Pocopson										
Riverside	160	160	0.00%	$880.00	$880.00	0.00%	$140,800	$140,800	0.00%	$0
Preserve	66	66	0.00%	$1,400.00	$1,400.00	0.00%	$92,400	$92,400	0.00%	$0
	226	226	0.00%				$233,200	$233,200	0.00%	$0
Edgmont										
Residential	660	675	2.27%	$1,275.00	$1,275.00	0.00%	$841,500	$860,625	2.27%	$19,125
Commercial Based on EDU	140	145	3.57%	$1,025.00	$1,025.00	0.00%	$143,500	$148,625	3.57%	$5,125
Commercial Based on Flow	12,200	12,390	1.56%	$10.25	$10.25	0.00%	$125,050	$126,998	1.56%	$1,948
							$1,110,050	$1,136,248		
TOTAL							$1,655,750	$1,819,448	9.89%	$301,198

DELAWARE COUNTY REGIONAL
WATER QUALITY CONTROL AUTHORITY

2019 BUDGET

REVENUE AND EXPENSE ANALYSIS

Revenues:	2018	2019	$ Change	% Change
Service Charges:				
Eastern Delaware County				
Central Delaware County Authority	$9,103,100	$9,619,575	$516,475	5.67%
Darby Creek Joint Authority	$17,782,800	$18,781,075	$998,275	5.61%
Muckinipates Authority	$4,234,000	$4,351,713	$117,713	2.78%
	$31,119,900	$32,752,363	$1,632,463	5.25%
Western Delaware County				
Residential	$6,240,271	$6,471,715	$231,444	3.71%
EDU Wholesale	$1,472,706	$1,748,679	$275,973	18.74%
Retail Industrial	$391,813	$368,636	-$23,177	-5.92%
Western Wholesale	$2,958,827	$3,199,382	$240,555	8.13%
Wholesale Industrial	$7,845,976	$8,209,215	$363,239	4.63%
Chester Ridley Creek	$4,489,500	$4,848,660	$359,160	8.00%
	$23,399,093	$24,846,287	$1,447,194	6.18%
Other Residential	$1,655,750	$1,819,448	$163,698	9.89%
Remote Locations	$399,250	$400,000	$750	0.19%
Total Service Charges	$56,573,993	$59,818,097	$3,244,104	5.73%
Other Revenues:				
Interest Income Investments	$750,000	$1,250,000	$500,000	66.67%
Residual Waste	$4,500,000	$4,750,000	$250,000	5.56%
Covanta Effluent Usage	$85,000	$85,000	$0	0.00%
Load Surcharge	$325,000	$325,000	$0	0.00%
Other Income	$300,000	$300,000	$0	0.00%
	$5,960,000	$6,710,000	$750,000	12.58%
Total Revenues	$62,533,993	$66,528,097	$3,994,104	6.39%
Expense:				
Philadelphia Plant Treatment Costs	$10,875,452	$11,187,262	$311,810	2.87%
Debt Service	$12,050,000	$12,750,000	$700,000	5.81%
Salaries & Wages	$10,765,295	$11,299,320	$534,025	4.96%
Overtime	$1,321,420	$1,497,850	$176,430	13.35%
Utilities	$3,097,600	$2,690,100	-$407,500	-13.16%
Chemicals	$815,000	$990,000	$175,000	21.47%
Employee Benefits	$4,807,075	$4,669,721	-$137,354	-2.86%
Pension	$1,600,000	$1,640,000	$40,000	2.50%
Repairs & Maintenance	$2,838,069	$2,848,450	$10,381	0.37%
Insurance	$837,347	$968,122	$130,775	15.62%
Minor Equipment & Supplies	$240,900	$351,513	$110,613	45.92%
Information Technology	$690,700	$773,000	$82,300	11.92%
Solicitor	$550,000	$500,000	-$50,000	-9.09%
Consulting	$225,000	$230,000	$5,000	2.22%
Solids Disposal/Grit Screening	$1,143,800	$1,252,500	$108,700	9.50%
Engineering	$350,000	$395,000	$45,000	12.86%
Other Contracted Services	$869,450	$869,950	$500	0.06%
Office & Advertising	$209,850	$226,850	$17,000	8.10%
Strategic Plan	$15,000	$0	-$15,000	-100.00%
Dues and Conferences	$72,050	$104,250	$32,200	44.69%
Edgmont Treatment	$135,000	$140,000	$5,000	3.70%
Education and Training	$126,700	$155,900	$29,200	23.05%
Contingency	$700,000	$700,000	$0	0.00%
Capital Reserve PWD and Chester LTCP	$7,000,000	$7,000,000	$0	0.00%
Capital Reserve Replacing Capital Assets	$1,198,285	$3,288,309	$2,090,024	174.42%
Total Expenses	$62,533,993	$66,528,097	$3,994,104	6.39%

NC = Not Calculable

DELAWARE COUNTY REGIONAL
WATER QUALITY CONTROL AUTHORITY

2019 BUDGET SUMMARY

EXPENSE BY DEPARTMENT

	2018	2019	$ Change	% Change
Expense:				
Administration, IT, Engineering				
Total	$6,864,135	$6,990,030	$125,895	1.83%
Debt Service:				
Total	$12,050,000	$12,750,000	$700,000	5.81%
Operations and Maintenance:				
Eastern Delaware County:				
Pump Stations	$1,322,335	$1,308,236	-$14,099	-1.07%
Philadelphia Treatment	$10,875,452	$11,187,262	$311,810	2.87%
Total East Expenses	$12,197,787	$12,495,498	$297,711	2.44%
Western Delaware County:				
Western Regional Treatment Plant	$12,577,580	$12,935,558	$357,978	2.85%
Industrial Pretreatment	$468,145	$494,338	$26,193	5.60%
Central Lab	$634,801	$673,878	$39,077	6.16%
Chester Pump Station	$404,932	$407,715	$2,783	0.69%
Sewer Maintenance	$2,342,355	$2,491,450	$149,095	6.37%
Chester Area Lift Stations	$122,715	$122,872	$157	0.13%
Eddystone Pump Station	$75,132	$83,568	$8,436	11.23%
Customer Revenue (Billing)	$738,867	$685,073	-$53,794	-7.28%
Marcus Hook/Lower Chi	$134,524	$131,897	-$2,627	-1.95%
Trainer Pump Stations	$35,971	$37,932	$1,961	5.45%
Remote Locations	$1,503,651	$1,567,565	$63,914	4.25%
Sludge Processing	$2,749,500	$2,902,250	$152,750	5.56%
Southern Pump Stations	$39,753	$38,386	-$1,367	-3.44%
Chester Ridley Creek	$359,866	$397,489	$37,623	10.45%
Edgmont	$335,994	$334,289	-$1,705	-0.51%
Contingency	$700,000	$700,000	$0	0.00%
Total West Expenses	$23,223,786	$24,004,260	$780,474	3.36%
Total Expenses	$54,335,708	$56,239,788	$1,904,080	3.50%
Expenses Without Debt Service	$42,285,708	$43,489,788	$1,204,080	2.85%

DELAWARE COUNTY REGIONAL
WATER QUALITY CONTROL AUTHORITY

2019

ESTIMATE OF SERVICE CHARGES

FOR

CENTRAL DELAWARE COUNTY AUTHORITY

DARBY CREEK JOINT AUTHORITY

MUCKINIPATES AUTHORITY

In Accordance With Section 3.06 of the
Service agreements Dated December 1, 1973
(plus subsequent amendments)

Adopted by Board: November 20, 2018

Approved by
Consulting Engineer: _____

2019
ESTIMATE
SERVICE CHARGE

To: Central Delaware County Authority

Statement of Estimates of Service Charge for
Calendar Year 2019 per Section 3.06 of
Service Agreement Dated December 1, 1973
(plus subsequent amendments)

		2018	2019
1.	Estimated Operating and Capital costs of DELCORA for Eastern Delaware County System	$31,119,900	$32,752,363
2.	Estimated Amount to be Paid to DELCORA During Year	$9,103,100	$9,619,575
3.	Amount of Credit Resulting from Previous Years Overpayment	$0	$0
4.	Amount of Credit Resulting from Governmental Grants, etc.	$0	$0
	Total Credits	$0	$0
	Net Estimated Billing	$9,103,100	$9,619,575
5.	Amount Due as Result of any Prior Year's Bill not Paid Plus Interest	$0	$0
	Total Due for Year	$9,103,100	$9,619,575

Payment of Above Due as Follows:

March 31, 2019	$2,404,894
June 30, 2019	$2,404,894
September 30, 2019	$2,404,894
December 31, 2019	$2,404,894
Total	$9,619,575

2019
ESTIMATE
SERVICE CHARGE

To: Darby Creek Joint Authority

Statement of Estimates of Service Charge for
Calendar Year 2019 per Section 3.06 of
Service Agreement Dated December 1, 1973
(plus subsequent amendments)

		2018	2019
1.	Estimated Operating and Capital costs of DELCORA for Eastern Delaware County System	$31,119,900	$32,752,363
2.	Estimated Amount to be Paid to DELCORA During Year	$17,782,800	$18,781,075
3.	Amount of Credit Resulting from Previous Years Overpayment NONE	$0	$0
4.	Amount of Credit Resulting from Governmental Grants, etc.	$0	$0
	Total Credits	$0	$0
	Net Estimated Billing	$17,782,800	$18,781,075
5.	Amount Due as Result of any Prior Year's Bill not Paid Plus Interest	$0	$0
	Total Due for Year	$17,782,800	$18,781,075

Payment of Above Due as Follows:

March 31, 2019	$4,695,269
June 30, 2019	$4,695,269
September 30, 2019	$4,695,269
December 31, 2019	$4,695,269
Total	$18,781,075

2019
ESTIMATE
SERVICE CHARGE

To: Muckinipates Authority

Statement of Estimates of Service Charge for
Calendar Year 2019 per Section 3.06 of
Service Agreement Dated December 1, 1973
(plus subsequent amendments)

	2018	2019
1. Estimated Operating and Capital costs of DELCORA for Eastern Delaware County System	$31,119,900	$32,752,363
2. Estimated Amount to be Paid to DELCORA During Year	$4,234,000	$4,351,713
3. Amount of Credit Resulting from Previous Years Overpayment	$0	$0
4. Amount of Credit Resulting from Governmental Grants, etc.	$0	$0
Total Credits	$0	$0
Net Estimated Billing	$4,234,000	$4,351,713
5. Amount Due as Result of any Prior Year's Bill not Paid Plus Interest	$0	$0
Total Due for Year	$4,234,000	$4,351,713

Payment of Above Due as Follows:

March 31, 2019	$1,087,928
June 30, 2019	$1,087,928
September 30, 2019	$1,087,928
December 31, 2019	$1,087,928
Total	$4,351,713

8. LIST OF ASSETS AND COSTS

DELCORA WASTEWATER SYSTEM
SUMMARY OF ANALYSIS OF ORIGINAL COST OF WASTEWATER SYSTEM
AS OF DECEMBER 13, 2019

ACCOUNT	DESCRIPTION		ORIGINAL COST ($)
353.3	LAND AND LAND RIGHTS - PUMPING	$	131,500.00
354.3	STRUCTURES AND IMPROVEMENTS - PUMPING	$	28,944,363.79
354.4	STRUCTURES AND IMPROVEMENTS - TREATMENT	$	12,681,792.80
354.7	STRUCTURES AND IMPROVEMENTS - GENERAL PLANT	$	2,434,828.00
360.21	COLLECTION SEWERS - FORCE - MAINS	$	40,269,449.52
361.21	COLLECTION SEWERS - GRAVITY - MAINS	$	8,324,260.54
361.23	COLLECTION SEWERS - GRAVITY - MANHOLES	$	3,473,591.30
362.2	SPECIAL COLLECTING STRUCTURES	$	8,739,493.81
363.2	SERVICES TO CUSTOMERS	$	307,904.86
364.2	FLOW MEASURING DEVICES	$	634,716.65
365.2	FLOW MEASURING INSTALLATIONS	$	12,625.00
371.3	PUMPING EQUIPMENT	$	11,042,301.00
380.3	TREATMENT AND DISPOSAL EQUIPMENT - PUMP STATIONS	$	37,071,005.38
380.4	TREATMENT AND DISPOSAL EQUIPMENT	$	105,317,582.56
390.7	COMPUTER AND SOFTWARE	$	311,997.68
391.7	TRANSPORTATION EQUIPMENT	$	3,788,348.39
396.7	COMMUNICATION EQUIPMENT	$	196,855.00
	SYSTEM TOTAL	$	263,682,616.27

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
353.30	LAND AND LAND RIGHTS - PUMPING						
	(PS-28 FM) Briddle Way (EPS-1)	PS-28 FM	2014	2014 Agreement	Says both ROW and sanitary sewer easement		$ 40,000.00
	(PS-1) Chester	PS-1	1976	Deed No. 772A	Indenture deed b/t City of Chester and DELCORA		$ 12,000.00
	(PS-11) Marcus Hook	PS-11 & PS-11 FM	1977	Deed No. 652			$ 79,500.00
	(PS-A) - BROOKHAVEN ROAD PS	(PS-A) - BROOKHAVEN ROAD PS, Folio Number 39-00-00009-01, AREA 270 X 200	1966		See Note 1		$ -
	(PS-B) - OLD MILL PS	(PS-B) - OLD MILL PS, Folio Number 39-00-00006-00, AREA	1937		See Note 1		$ -
	(PS-10) - EDDYSTONE PS	(PS-10) - EDDYSTONE PS, Folio Number 18-00-00161-01, AREA 111 X 340 IRR LOT 1	2006		See Note 1		$ -
	(PS-3) - PS-6 WRTP	(PS-3) - PS-6 WRTP	2017		See Note 1		$ -
	(PS-4) - FELTONVILLE PS (CONCORD)	(PS-4) - FELTONVILLE PS (CONCORD)	1970		See Note 1		$ -
	(PS-7) - CENTRAL DELAWARE COUNTY PS	(PS-7) - CENTRAL DELAWARE COUNTY PS	1978		See Note 1		$ -
	(PS-8) - MUCKINIPATES PS	(PS-8) - MUCKINIPATES PS, Folio Number 31-00-00609-05, AREA 125 X 258 INTERIOR LOT	1978		See Note 1		$ -
	(PS-9) - DARBY CREEK PS	(PS-9) - DARBY CREEK PS	1974		See Note 1		$ -
	(PS-12) - PRICE STREET PS	(PS-12) - PRICE STREET PS	2009		See Note 1		$ -
	(PS-13) - SMITH STREET PS	(PS-13) - SMITH STREET PS	1997		See Note 1		$ -
	(PS-16) - BROOMALL STREET PS	(PS-16) - BROOMALL STREET PS	1964		See Note 1		$ -
	(PS-22) - DELAWARE AVENUE INJECTOR STA.	(PS-22) - DELAWARE AVENUE INJECTOR STA.	1979		See Note 1		$ -
	(PS-23) - VISCOSE VILLAGE PS	(PS-23) - VISCOSE VILLAGE PS	1965		See Note 1		$ -
	(PS-24) - STADIUM (RIVERFRONT) PS	(PS-24) - STADIUM (RIVERFRONT) PS	2009		See Note 1		$ -
	(PS-26) - LONGPOINT LANE INJECTOR STA.	(PS-26) - LONGPOINT LANE INJECTOR STA., Folio Number 39-00-00066-50, AREA 2.15 ACRES	1956		See Note 1		$ -
	(PS-27) - CHESTER-RIDLEY CREEK PS	(PS-27) - CHESTER-RIDLEY CREEK PS	2013		See Note 1		$ -
	(PS-29) - RUNNYMEADE PS (EPS-2)	(PS-29) - RUNNYMEADE PS (EPS-2)	2014		See Note 1		$ -
	(PS-30) - DREAM VALLEY PS (PS-3)	(PS-30) - DREAM VALLEY PS (PS-3)	2014		See Note 1		$ -
	(PS-31) - ROSE VALLEY PS	(PS-31) - ROSE VALLEY PS , Folio Number 39-00-00040-00, AREA 90 X 344 X IRR LOT 18	2016		See Note 1		$ -
	(PS-2) - 8TH STREET PS	(PS-2) - 8TH STREET PS	1951		See Note 1		$ -
	TOTAL LAND AND LAND RIGHTS - PUMPING						**$ 131,500.00**
		Note 1: Property value included in original facilities purchase price (reference: Section 8 - List of Assets & Costs, Account Code 354.30)					
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING						
	PS-A Brookhaven Road	(PS-A) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1966	2018 appraisel number, backdated to the correct year.			$ 13,222.96
	PS-B Old Mill	(PS-B) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1937	2018 appraisel number, backdated to the correct year.			$ 8,161.06
	PS-1 Chester	(PS-1) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1976	Contract Nos. 10, 11			$ 3,981,717.75
	PS-2 8th Street	(PS-2) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1951	CP-9607-C			$ 66,554.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
	PS-3 PS-6	(PS-3) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	2017	Contract TC-1707-C	(PS-3) is the Influent Pump Station (PS-6) at the WRTP. Cost is included in Account Code 380.3.		$ -
	PS-4 Feltonville	(PS-4) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1970	2018 appraisel number, backdated to the correct year.			$ 17,920.42
	PS-7 Central Delaware County	(PS-7) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1978	Contract Nos. 18A, B, C, D	Original Cost for (PS-7) & (PS-8) included in Contract Nos. 18A, B, C, D		$ 5,121,775.71
	PS-8 Muckinipates	(PS-8) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1978	Contract Nos. 18A, B, C, D	Original Cost for (PS-7) & (PS-8) included in Contract Nos. 18A, B, C, D		$ -
	PS-9 Darby Creek	(PS-9) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1974	Contract Nos. 7, 9, 8.			$ 2,828,683.00
	PS-10 Eddystone	(PS-10) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	2006	2018 appraisel number, backdated to the correct year.			$ 950,018.53
	PS-11 Marcus Hook	(PS-11) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1955	Weston			$ 389,440.99
	PS-12 Price Street	(PS-12) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	2009	Contract PW-0809-C			$ 586,225.00
	PS-13 Smith Street	(PS-13) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1997	2018 appraisel number, backdated to the correct year.			$ 522,606.21
	PS-16 Broomall Street	(PS-16) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1964	2018 appraisel number, backdated to the correct year.			$ 42,481.72
	PS-22 Delaware Avenue Ejector Sta.	(PS-22) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1979	2018 appraisel number, backdated to the correct year.			$ 38,968.15
	PS-23 Viscose Village	(PS-23) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1965	2018 appraisel number, backdated to the correct year.			$ 105,297.59
	PS-24 Stadium (aka Riverfront)	(PS-24) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	2009	2018 appraisel number, backdated to the correct year.			$ 1,538,096.04
	PS-26 Longpoint Lane Ejector Sta.	(PS-26) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1956	2018 appraisel number, backdated to the correct year.			$ 8,979.67
	PS-27 Chester-Ridley Creek	(PS-27) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	2013	Contract PW-1305-C			$ 8,647,630.00
	PS-28 Bridle Way (EPS-1)	(PS-28) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	2014	Contract SW-1318-C	Original Cost for (PS-28), (PS-29), & (PS-30) included in Contract Nos. SW-1318-C		$ 2,314,900.00
	PS-29 Runnymeade (EPS-2)	(PS-29) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	2014	Contract SW-1318-C	Original Cost for (PS-28), (PS-29), & (PS-30) included in Contract Nos. SW-1318-C		$ -

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
	PS-30 Dream Valley (EPS-3)	(PS-30) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	2014	Contract SW-1318-C	Original Cost for (PS-28), (PS-29), & (PS-30) included in Contract Nos. SW-1318-C		$ -
	PS-31 Rose Valley	(PS-31) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	2016	Contract PFR-1705-C			$ 1,748,785.00
	PS-33 Delaware River Interceptor Bypass	(PS-33) - Initial facility cost including pump station, building , generator, fencing, paving, etc.	2014	Estimate			$ 12,900.00
	TOTAL STRUCTURES AND IMPROVEMENTS - PUMPING						**$ 28,944,363.79**
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT						
	B-1 (Grit)	B-1 (Grit) - Electrical Updates	2018	TC-1717-C			$ 146,052.00
	B-1 (Grit)	B-1 (Grit) - Grit Removal System Rehabilation	2001	TC-0006-C, TC-0106-C**			$ 878,370.00
	B-1 (Grit)	B-1 (Grit) - Original Installation	1974	Original plant construction			$ 509,210.00
	B-2 (Control)	B-2 (Control) - Control Room Upgrade in B-2	2003	TC-0306-C			$ 130,900.00
	B-2 (Control)	B-2 (Control) - Original Installation	1974	Original plant construction			$ 3,407,361.00
	B-2 (Control)	B-2 (Control) - SCADA/Instrumentation Upgrade	2018	TC-1717-C			$ 383,719.00
	B-2 (Control)	B-2 (Control) - Security Upgrade Project	2005	P2005-09			$ 447,933.00
	B-2 (Control)	B-2 (Control) - Telemetry (SCADA)	1988	TC-8805-C			$ 142,621.00
	B-5 (Engineering)	B-5 (Engineering) - Architectural Upgrade B2, B3 & B5	2003	TC-0311-C: Not split			$ 2,266,464.00
	B-5 (Maintenance)	B-5 (Maintenance) - Domestic Hot Water Heater System At Maintenance & Stores at WRTP	2000	TC-0004-C (Re-Bid)			$ 18,816.00
	B-5 (Maintenance)	B-5 (Maintenance) - Original Installation	1992	TC-9208-C			$ 1,496,152.00
	B-7 (Garage)	B-7 (Garage) - DELCORA Vehicle Garage Construction	1989	TC-8906-C			$ 96,600.00
	B-7 (Garage)	B-7 (Garage) - Garage Roof & Insulation	2018	TC-1717-C			$ 74,838.00
	B-7 (Garage)	B-7 (Garage) - Original Installation	1989		Includes garage between Primary Clarifiers and Aeration Tanks.		$ 375,138.00
	EPS-1 (Building only)	EPS-1 (Building only) - Original Installation	1972		Pumps and related equipment removed from service in 2018.		$ 121,787.00
	Maintenance Office (trailer)	Maintenance Office (trailer) - Original Installation	1994	DELCORA			$ 4,000.00
	Pre-Fabricated Metal Building	Pre-Fabricated Metal Building - Pre-Fabricated Metal Building with Partial Installation	2007	TC-0709-C			$ 94,800.00
	Roof Repairs	Roof Repairs - Roof Repairs at WRTP and 10 Remote Stations	2003	TPEW-0308-C			$ 792,476.00
	Roof Replacement	Roof Replacement - Roof Replacement - B-2; B-3; P-4	1993	TC-9304-C			$ 142,477.00
	Storage Sheds	Storage Sheds - Original Installation	2015	DELCORA			$ 50,800.00
	WRTP & Remote Pump Station	WRTP & Remote Pump Station - Coping & Masonry Repairs	2006	TC-0609-C			$ 294,000.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
	Corrine Village aka Pocopson Preserve	Corrine Village aka Pocopson Preserve WWTP - TREATMENT SYSTEM	2010	2018 appraisel number, backdated to the correct year.			$ 423,715.45
	Sheeder Tract aka Riverside	Sheeder Tract aka Riverside WWTP - TREATMENT SYSTEM	2007	2018 appraisel number, backdated to the correct year.			$ 383,563.35
	TOTAL STRUCTURES AND IMPROVEMENTS - TREATMENT						**$ 12,681,792.80**
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL PLANT						
		Administration Building - Generator	2013	Weston			$ 104,328.00
		Administration Building - New administration building	1997	AC-9606-C			$ 1,749,072.00
		Administration Building - New Roof	2019	AC-1906-C			$ 174,000.00
		Remote Operations Building - Former SWDCMA STP control building	2016	Acquistion			$ 407,428.00
	TOTAL STRUCTURES AND IMPROVEMENTS - GENERAL PLANT						**$ 2,434,828.00**
360.21	COLLECTION SEWERS - FORCE - MAINS						
		Retired 48" PCCP FM - CPS -> Booth Street	1978	Contract 12		11,300	$ 2,435,466.00
	PS-1	(PS-1) Chester FM - 48" DI	2009	FC-0916-C	Original Cost included in Contract No. FC-0916-C	620	$ 11,706,121.00
	PS-1	(PS-1) Chester FM - 54" DI	2009	FC-0916-C	Original Cost included in Contract No. FC-0916-C	12,030	$ -
	PS-10	(PS-10) Eddystone FM - 8" CIP	1931	Cost based on Price & Smith Street FM.		1,921	$ 9,078.00
	PS-11	(PS-11) Sun - Marcus Hook FM - 30" PCCP	1977	Contract No. 15	Original Cost included in Contract No. 15	2,250	$ 2,031,340.57
	PS-11	(PS-11) Sun - Marcus Hook FM - 36" PCCP	1977	Contract No. 15	Original Cost included in Contract No. 15	5,695	$ -
	PS-11	(PS-11) Central Delaware Diversion FM - 36" DI	2000	CD-9911-C		17,693	$ 2,542,300.00
	PS-11	(PS-11) Marcus Hook FM FM - 16" CIP	1977	Aquired		94	$ 7,958.00
	PS-12	(PS-12) Price Street FM - 10" DI	2007	FW-0707-C	Original Cost included in Contract No. FW-0707-C	1,345	$ 949,741.00
	PS-13	(PS-13) Smith Street FM - 8" DI	2007	FW-0707-C	Original Cost included in Contract No. FW-0707-C	3,230	$ -
	PS-16	(PS-16) Broomall Street FM - 8" CIP	1964	Aquired		760	$ 18,572.00
	PS-2	(PS-2) 8th Street FM - 8" CIP	1951	Aquired		465	$ 6,592.00
	PS-22	(PS-22) Delaware Avenue Ejector FM - 4" CIP	1970	Aquired		345	$ 12,439.00
	PS-23	(PS-23) Viscose Village FM - 12" CIP	1965	Aquired		855	$ 21,675.00
	PS-24	(PS-24) Stadium FM - 10" DI	2010	Dedicated	Part II received 11/2009	4,650	$ 1,068,448.00
	PS-26	(PS-26) Longpoint Lane Ejector FM - 6" CIP	1956	Cost based on Price & Smith Street FM.		848	$ 14,731.00
	PS-27	(PS-27) Chester Ridley Creek FM - 30" DI	2013	FW-1304-C	Original Cost included in Contract No. FW-1304-C	10,410	$ 5,792,392.00
	PS-27	(PS-27) Chester Ridley Creek FM - 30" HDPE	2013	FW-1304-C	Original Cost included in Contract No. FW-1304-C	4,770	$ -
	PS-28	(PS-28) Bridle EPS-1 FM - 8" fPVC	2014	SW-1318-C	Original Cost included in Contract No. SW-1318-C	2,022	$ -
	PS-29	(PS-29) Runnymeade EPS-2 FM - 10" fPVC	2014	SW-1318-C	Gradyville Road Original Cost included in Contract No. SW-1318-C	1,860	$ 4,933,283.45
	PS-30	(PS-30) Dream Valley EPS-3 FM - 2" fPVC	2014	SW-1318-C	Original Cost included in Contract No. SW-1318-C	698	$ -

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
	PS-31	(PS-31) Rose Valley FM - 6" HDPE	2017	PFR-1705-C		2,950	$ 998,650.00
	PS-33	(PS-33) Delaware River Interceptor Bypass FM - 8" HDPE	2016	Estimated - Weston		685	$ 121,500.00
	PS-4	(PS-4) Feltonville FM - 8" CIP	1970	Aquired		925	$ 33,351.00
	PS-7	(PS-7) Central Delaware FM - 36" PCCP	1977	Contract No. 20	Original Cost included in Contract No. 20	9,820	$ 2,774,989.00
	PS-8	(PS-8) Muckinipates FM - 48" PCCP	1977	Contract No. 20	Original Cost included in Contract No. 20	8,800	$ -
	PS-9	(PS-9) Darby Creek FM - 66" PCCP	1972	Contract No. 06	FM Sections 2 and 3	10,040	$ 2,099,084.50
			1974	Contract No. 06A	FM Sections 1 and 4	2,985	$ 2,579,569.00
	PS-A	(PS-A) Brookhaven Road FM - 8" Steel	1966	Cost based on Price & Smith Street FM.		1,050	$ 27,934.00
	PS-B	(PS-B) Old Mill FM - 6" CIP	1937	Cost based on Price & Smith Street FM.		2,550	$ 15,043.00
		Edgmont Low Pressure Mains FM - 2" HDPE	2014	SW-1318-C	6 lines Original Cost included in Contract No. SW-1318-C	4,484	$ -
		Edgmont Low Pressure Mains FM - 3" HDPE	2014	SW-1318-C	Original Cost included in Contract No. SW-1318-C	1,130	$ -
		Springhill Farms FM - 12" PVC	1990	Cost based on Bridle FM.		717	$ 69,192.00
	TOTAL COLLECTION SEWERS - FORCE - MAINS					**129,997**	**$ 40,269,449.52**
361.21	COLLECTION SEWERS - GRAVITY - MAINS						
		10" PVC	2016	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	273	$ 15,054.00
		10" VCP	1900	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	708	$ 366.00
		10" VCP	1930	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	31,762	$ 34,389.00
		10" VCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	864	$ 3,797.00
		12" PVC	1970	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	1,129	$ 12,684.00
		12" PVC	1971	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	1,549	$ 19,925.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		12" PVC	2008	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	700	$ 47,327.00
		12" VCP	1900	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	2,391	$ 1,887.00
		12" VCP	1930	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	29,590	$ 48,872.00
		12" VCP	1937	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	12,650	$ 24,186.00
		12" VCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	3,762	$ 25,221.00
		12" VCP	1966	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	5,062	$ 41,967.00
		15" PVC	1970	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	1,712	$ 20,164.00
		15" PVC	2010	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	1,742	$ 130,748.00
		15" VCP	1900	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	351	$ 290.00
		15" VCP	1930	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	13,878	$ 24,027.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		15" VCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	3,954	$ 27,787.00
		16" VCP	1930	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	195	$ 358.00
		18" PVC	1970	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	510	$ 7,261.00
		18" RCP	1900	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	2,257	$ 2,256.00
		18" RCP	1930	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	25,311	$ 52,951.00
		18" RCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	13,554	$ 115,100.00
		18" RCP	1969	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	130	$ 10,449.95
		21" RCP	1900	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	2,228	$ 2,521.00
		21" RCP	1930	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	3,442	$ 8,151.00
		21" RCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	3,916	$ 37,643.00
		24" Brick	1961	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	50	$ 2,682.64

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		24" PVC	1970	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	817	$ 13,973.00
		24" RCP	1900	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	23,804	$ 28,596.00
		24" RCP	1930	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	11,216	$ 28,199.00
		24" RCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	11,245	$ 114,753.00
		27" RCP	1930	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	315	$ 947.00
		30" Brick	1900	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	3,072	$ 4,929.00
		30" Brick	1930	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	3,065	$ 10,293.00
		30" RCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	11,475	$ 156,417.00
		30" RCP	1970	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	280	$ 6,401.00
		36" Brick	1900	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	77,555	$ 146,894.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		36" Brick	1930	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	8,110	$ 104,286.02
		36" Brick	1930	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	4,557	$ 18,064.00
		36" Brick	1931	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	885	$ 10,146.85
		36" Brick	1961	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	1,625	$ 87,185.85
		36" Brick	1986	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	570	$ 155,076.95
		36" RCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	7,550	$ 121,477.00
		36" RCP	1969	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	155	$ 12,459.56
		36" RCP	1970	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	1,422	$ 38,338.00
		4" VCP	1930	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	183	$ 185.00
		40" RCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	421	$ 7,494.00
		42" Brick	1900	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	1,477	$ 3,225.00
		42" RCP	1931	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	450	$ 5,159.41

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		42" RCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	467	$ 8,662.00
		44" Brick	1900	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	366	$ 841.00
		48" Brick	1900	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	7,282	$ 18,007.00
		48" Brick	1930	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	4,220	$ 54,264.74
		48" Brick	1930	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	1,382	$ 7,152.00
		48" Brick & Concrete	1930	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	1,835	$ 23,596.16
		48" CIP	1961	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	1,190	$ 63,846.87
		48" RCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	6,151	$ 129,208.00
		48" RCP	1961	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	865	$ 46,409.70
		48" RCP	1969	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	200	$ 16,076.85
		48" RCP	1970	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	543	$ 19,117.00
		52" Brick	1900	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	615	$ 1,663.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		52" RCP	1926	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	870	$ 11,462.83
		52" RCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	3,587	$ 82,393.00
		54" RCP	1930	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	1,660	$ 21,345.84
		54" RCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	1,719	$ 40,335.00
		6" VCP	1930	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	777	$ 784.00
		60" RCP	1961	DELCORA GIS	Outfall costs use the LF price from the insurance evaluation, backdated to the correct year.	50	$ 2,682.64
		64" RCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	686	$ 20,031.00
		72" Brick	1900	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	2,467	$ 9,301.00
		72" RCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	800	$ 25,624.00
		72" RCP	1970	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	223	$ 11,971.00
		8" PVC	1970	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	5,123	$ 35,178.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		8" PVC	1971	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	669	$ 5,259.00
		8" PVC	1976	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	540	$ 6,446.00
		8" PVC	1985	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	2,042	$ 42,591.00
		8" PVC	1990	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	55,963	$ 1,316,669.00
		8" PVC	2004	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	2,242	$ 79,312.00
		8" PVC	2005	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	43,522	$ 1,611,245.00
		8" PVC	2006	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	5,206	$ 200,635.00
		8" PVC	2007	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	771	$ 30,558.00
		8" PVC	2008	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	1,491	$ 61,604.00
		8" PVC	2009	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	12,202	$ 519,931.92

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		8" PVC	2012	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	4,524	$ 209,338.77
		8" PVC	2015	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	6,360	$ 317,346.00
		8" PVC	2016	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	13,957	$ 717,452.00
		8" VCP	1900	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	755	$ 364.00
		8" VCP	1930	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	267,907	$ 270,403.00
		8" VCP	1937	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	206	$ 241.00
		8" VCP	1960	DELCORA GIS	The installed cost is calculated using the GM Pricing Structure for cost per pipe size, and using the Cost Construction Index to estimate what the cost would have been when the gravity main was laid.	2,176	$ 8,915.00
		Unknown	1900	DELCORA GIS	For pipes that are unknown in size, or unknown in date, or both, weighted averages are used.	62	$ 30.00
		Unknown	1930	DELCORA GIS	For pipes that are unknown in size, or unknown in date, or both, weighted averages are used.	5,738	$ 5,791.00
		Unknown	1937	DELCORA GIS	For pipes that are unknown in size, or unknown in date, or both, weighted averages are used.	10,877	$ 97,681.00
		Unknown	1956	DELCORA GIS	For pipes that are unknown in size, or unknown in date, or both, weighted averages are used.	912	$ 8,190.00
		Unknown	1960	DELCORA GIS	For pipes that are unknown in size, or unknown in date, or both, weighted averages are used.	487	$ 1,995.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		Unknown	1970	DELCORA GIS	For pipes that are unknown in size, or unknown in date, or both, weighted averages are used.	43,479	$ 298,541.00
		Unknown	1971	DELCORA GIS	For pipes that are unknown in size, or unknown in date, or both, weighted averages are used.	1,418	$ 12,734.00
		Unknown	1990	DELCORA GIS	For pipes that are unknown in size, or unknown in date, or both, weighted averages are used.	466	$ 10,964.00
		Unknown	1992	DELCORA GIS	For pipes that are unknown in size, or unknown in date, or both, weighted averages are used.	477	$ 11,823.00
		Unknown	Unknown	DELCORA GIS	For pipes that are unknown in size, or unknown in date, or both, weighted averages are used.	6,188	$ 35,684.00
	TOTAL COLLECTION SEWERS - GRAVITY - MAINS					**867,635**	**$ 8,324,260.54**
361.23	COLLECTION SEWERS - GRAVITY - MANHOLES						
		Manholes	1900	DELCORA GIS		438	$ 12,422.20
		Manholes	1930	DELCORA GIS		1,865	$ 103,718.84
		Manholes	1937	DELCORA GIS		137	$ 9,366.84
		Manholes	1956	DELCORA GIS		34	$ 6,953.78
		Manholes	1960	DELCORA GIS		270	$ 75,117.37
		Manholes	1966	DELCORA GIS		22	$ 6,437.13
		Manholes	1970	DELCORA GIS		282	$ 120,089.06
		Manholes	1971	DELCORA GIS		3	$ 853.71
		Manholes	1985	DELCORA GIS		10	$ 11,945.16
		Manholes	1990	DELCORA GIS		87	$ 118,409.05
		Manholes	1992	DELCORA GIS		3	$ 3,994.91
		Manholes	2000	DELCORA GIS		67	$ 132,377.37
		Manholes	2004	DELCORA GIS		16	$ 50,435.96
		Manholes	2005	DELCORA GIS		256	$ 1,583,347.74
		Manholes	2006	DELCORA GIS		159	$ 367,981.46
		Manholes	2007	DELCORA GIS		6	$ 12,936.21
		Manholes	2008	DELCORA GIS		20	$ 47,837.03
		Manholes	2009	DELCORA GIS		67	$ 156,815.50
		Manholes	2010	DELCORA GIS		7	$ 14,093.41
		Manholes	2011	DELCORA GIS		7	$ 23,998.69
		Manholes	2012	DELCORA GIS		25	$ 63,542.30
		Manholes	2015	DELCORA GIS		42	$ 111,429.26
		Manholes	2016	DELCORA GIS		94	$ 246,780.36
		Manholes	2019	DELCORA GIS		1	$ 2,924.40
		Manholes	Unknown	DELCORA GIS		330	$ 189,783.57
	TOTAL COLLECTION SEWERS - GRAVITY - MANHOLES					**4,248**	**$ 3,473,591.30**

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
362.20	SPECIAL COLLECTING STRUCTURES						
	Regulator No. 002	Regulator No. 002 - (1) Vault(s)	1930	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 1,989.87
	Regulator No. 002	Regulator No. 002 - 5" x 7 1/2" Brown & Brown	2009	Regulator costs are from bond reports, contracts, and estimation.			$ 191,466.66
	Regulator No. 002	Regulator No. 002 - None Backflow Device	NA	Weston			$ -
	Regulator No. 003	Regulator No. 003 - (1) Vault(s)	1930	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 1,989.87
	Regulator No. 003	Regulator No. 003 - 7 1/2" x 7 3/4" Brown & Brown	2009	Regulator costs are from bond reports, contracts, and estimation.			$ 191,466.66
	Regulator No. 003	Regulator No. 003 - None Backflow Device		Weston			$ -
	Regulator No. 004	Regulator No. 004 - (1) Vault(s)	1930	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 1,989.87
	Regulator No. 004	Regulator No. 004 - 7 1/2" x 15 3/8" Brown & Brown	2018	Regulator costs are from bond reports, contracts, and estimation.			$ 228,411.50
	Regulator No. 004	Regulator No. 004 - Duckbill Backflow Device	1984	Weston			$ 3,564.22
	Regulator No. 005	Regulator No. 005 - (2) Vault(s)	1930	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 3,979.73
	Regulator No. 005	Regulator No. 005 - 12" x 12" Brown & Brown	2009	Regulator costs are from bond reports, contracts, and estimation.			$ 191,466.66
	Regulator No. 005	Regulator No. 005 - 48"x48" Rubber Tide Gate Backflow Device	2002	Weston			$ 6,540.00
	Regulator No. 007	CSO Screening Facility - Outfall 007 CSO Screening Facility	2009	Dedicated			$ 881,460.00
	Regulator No. 007	Regulator No. 007 - (2) Vault(s)	1930	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 3,979.73
	Regulator No. 007	Regulator No. 007 - 5" x 6" Brown & Brown	2009	Regulator costs are from bond reports, contracts, and estimation.			$ 308,294.95
	Regulator No. 007	Regulator No. 007 - Tide Gate Backflow Device	2002	Weston			$ 6,540.00
	Regulator No. 008	Regulator No. 008 - (2) Vault(s)	1930	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 3,979.73
	Regulator No. 008	Regulator No. 008 - 7 1/2" x 12 3/8" Brown & Brown	2005	Regulator costs are from bond reports, contracts, and estimation.			$ 612,878.83
	Regulator No. 008	Regulator No. 008 - Double Tide Gate Backflow Device	2002	Weston			$ 13,080.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
	Regulator No. 009	Regulator No. 009 - (2) Vault(s)	1930	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 3,979.73
	Regulator No. 009	Regulator No. 009 - 5" x 7 1/2" Brown & Brown	2005	Regulator costs are from bond reports, contracts, and estimation.			$ 612,878.83
	Regulator No. 009	Regulator No. 009 - Double Tide Gate Backflow Device	2002	Weston			$ 13,080.00
	Regulator No. 010	Regulator No. 010 - (1) Vault(s)	1930	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 1,989.87
	Regulator No. 010	Regulator No. 010 - 7 1/2" x 15 3/8" Brown & Brown	2012	Regulator costs are from bond reports, contracts, and estimation.			$ 308,294.95
	Regulator No. 010	Regulator No. 010 - None Backflow Device	NA	Weston			$ -
	Regulator No. 011	Regulator No. 011 - (1) Vault(s)	1930	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 1,989.87
	Regulator No. 011	Regulator No. 011 - 5" x 9 1/4" Brown & Brown	2005	Regulator costs are from bond reports, contracts, and estimation.			$ 612,878.83
	Regulator No. 011	Regulator No. 011 - None Backflow Device	NA	Weston			$ -
	Regulator No. 012	Regulator No. 012 - (2) Vault(s)	1961	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 16,605.09
	Regulator No. 012	Regulator No. 012 - Brown & Brown	2005	Regulator costs are from bond reports, contracts, and estimation.			$ 173,795.00
	Regulator No. 012	Regulator No. 012 - Double 24"x24" Rubber Tide Gate Backflow Device	2002	Weston			$ 13,080.00
	Regulator No. 013	Regulator No. 013 - (2) Vault(s)	1961	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 16,605.09
	Regulator No. 013	Regulator No. 013 - 7 1/2" x 7 3/4" Brown & Brown	2012	Regulator costs are from bond reports, contracts, and estimation.			$ 308,294.95
	Regulator No. 013	Regulator No. 013 - Double 48"x48" Rubber Tide Gate Backflow Device	2002	Weston			$ 13,080.00
	Regulator No. 014	Regulator No. 014 - (2) Vault(s)	1961	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 16,605.09
	Regulator No. 014	Regulator No. 014 - 12" x 15" Brown & Brown	2012	Regulator costs are from bond reports, contracts, and estimation.			$ 308,294.95
	Regulator No. 014	Regulator No. 014 - Double 48"x48" Rubber Tide Gate Backflow Device	2002	Weston			$ 13,080.00
	Regulator No. 015	Regulator No. 015 - (2) Vault(s)	1986	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 84,201.74
	Regulator No. 015	Regulator No. 015 - 7 1/2" x 15 3/8" Brown & Brown	2018	Regulator costs are from bond reports, contracts, and estimation.			$ 228,411.50

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
	Regulator No. 015	Regulator No. 015 - Single Neenah #R-50-50-SF36 Tide Gate Backflow Device	1986	Weston			$ 1,196.33
	Regulator No. 016	Regulator No. 016 - (2) Vault(s)	1926	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 4,077.76
	Regulator No. 016	Regulator No. 016 - 7 1/2" x 12 3/8" Brown & Brown	1999	Regulator costs are from bond reports, contracts, and estimation.			$ 308,294.95
	Regulator No. 016	Regulator No. 016 - Double 60"x60" Rubber Tide Gate Backflow Device	2002	Weston			$ 13,080.00
	Regulator No. 017	Regulator No. 017 - (2) Vault(s)	1961	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 16,605.09
	Regulator No. 017	Regulator No. 017 - 5" x 6" Brown & Brown	1987	Regulator costs are from bond reports, contracts, and estimation.			$ 308,294.95
	Regulator No. 017	Regulator No. 017 - Single Neenah Cast Iron Tide Gate Backflow Device	1961	Weston			$ 220.50
	Regulator No. 018	Regulator No. 018 - (1) Vault(s)	1961	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 8,302.55
	Regulator No. 018	Regulator No. 018 - 5" x 6" Brown & Brown	1961	Regulator costs are from bond reports, contracts, and estimation.			$ 308,294.95
	Regulator No. 018	Regulator No. 018 - None Backflow Device	NA	Weston			$ -
	Regulator No. 019	Regulator No. 019 - (1) Vault(s)	1931	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 1,774.22
	Regulator No. 019	Regulator No. 019 - 7 1/2" x 15 3/8" Brown & Brown	1974	Regulator costs are from bond reports, contracts, and estimation.			$ 308,294.95
	Regulator No. 019	Regulator No. 019 - None Backflow Device	NA	Weston			$ -
	Regulator No. 020	Regulator No. 020 - (1) Vault(s)	1931	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 1,774.22
	Regulator No. 020	Regulator No. 020 - 7 1/2" x 7 3/4" Brown & Brown	2002	Regulator costs are from bond reports, contracts, and estimation.			$ 308,294.95
	Regulator No. 020	Regulator No. 020 - None Backflow Device	NA	Weston			$ -
	Regulator No. 021	Regulator No. 021 - (2) Vault(s)	1969	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 24,878.23
	Regulator No. 021	Regulator No. 021 - 7 1/2" x 7 3/4" Brown & Brown	2003	Regulator costs are from bond reports, contracts, and estimation.			$ 308,294.95
	Regulator No. 021	Regulator No. 021 - Double 18"x18" Rubber Tide Gate Backflow Device	2002	Weston			$ 13,080.00
	Regulator No. 022	Regulator No. 022 - (1) Vault(s)	1969	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 12,439.12

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
	Regulator No. 022	Regulator No. 022 - 5" x 6" Brown & Brown	2002	Regulator costs are from bond reports, contracts, and estimation.			$ 308,294.95
	Regulator No. 022	Regulator No. 022 - None Backflow Device	NA	Weston			$ -
	Regulator No. 023	Regulator No. 023 - (2) Vault(s)	1969	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 24,878.23
	Regulator No. 023	Regulator No. 023 - 7 1/2" x 7 3/4" Brown & Brown	2005	Regulator costs are from bond reports, contracts, and estimation.			$ 173,795.00
	Regulator No. 023	Regulator No. 023 - Double 36"x36" Rubber Tide Gate Backflow Device	2002	Weston			$ 13,080.00
	Regulator No. 024	Regulator No. 024 - (2) Vault(s)	1931	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 3,548.43
	Regulator No. 024	Regulator No. 024 - 5" x 9 1/4" Brown & Brown	2005	Regulator costs are from bond reports, contracts, and estimation.			$ 173,795.00
	Regulator No. 024	Regulator No. 024 - Double 48"x48" Rubber Tide Gate Backflow Device	2002	Weston			$ 13,080.00
	Regulator No. 025	Regulator No. 025 - (2) Vault(s)	1931	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 3,548.43
	Regulator No. 025	Regulator No. 025 - 5" x 6" Brown & Brown	2003	Regulator costs are from bond reports, contracts, and estimation.			$ 308,294.95
	Regulator No. 025	Regulator No. 025 - Double 36"x36" Rubber Tide Gate Backflow Device	2002	Weston			$ 13,080.00
	Regulator No. 026	Regulator No. 026 - (1) Vault(s)	1931	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 1,774.22
	Regulator No. 026	Regulator No. 026 - 7 1/2" x 12 3/8" Brown & Brown	1999	Regulator costs are from bond reports, contracts, and estimation.			$ 308,294.95
	Regulator No. 026	Regulator No. 026 - None Backflow Device	NA	Weston			$ -
	Regulator No. 031	Regulator No. 031 - (2) Vault(s)	1961	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 16,605.09
	Regulator No. 031	Regulator No. 031 - Double 36"x36" Rubber Tide Gate Backflow Device	2002	Weston			$ 13,080.00
	Regulator No. 031	Regulator No. 031 - No Regulator	1961	Regulator costs are from bond reports, contracts, and estimation.			$ -
	Regulator No. 033	Regulator No. 033 - (2) Vault(s)	1961	Vault Costs are from the 2005 bid for the Rehabilitation of Regulators 02, 04, and 05. The average vaule replacement cost was $71,645 in March 2005.	The ENR CCI value for March 2005 = 7309		$ 16,605.09
	Regulator No. 033	Regulator No. 033 - 2 - Single Gates Backflow Device	1961	Weston			$ 317.93
	Regulator No. 033	Regulator No. 033 - No Regulator	1961	Regulator costs are from bond reports, contracts, and estimation.			$ -
	TOTAL SPECIAL COLLECTING STRUCTURES						**$ 8,739,493.81**

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
363.20	SERVICES TO CUSTOMERS						
		4" PVC	1957	DELCORA GIS	The age of the laterals are assumed to be the same age as the average Chester gravity main. The length of an average lateral is assumed to be the same as the average length of a lateral in Crozier Hills and Upland Terrace & Pusey Estate, where lateral data was available. The number of laterals that DELCORA owns is assumed to be the same as the number of bills they sent out for the 4th quarter of 2019.	85,536	$ 307,904.86
	TOTAL SERVICES TO CUSTOMERS					**85,536**	**$ 307,904.86**
364.20	FLOW MEASURING DEVICES						
		Flowav - AV Sensor	2012	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	3	$ 4,543.28
		Flowav - AV Sensor	2013	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	5	$ 7,767.40
		Flowav - AV Sensor	2014	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	12	$ 19,149.45
		Flowav - AV Sensor	2015	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	2	$ 3,266.10
		Flowav - AV Sensor	2016	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	20	$ 33,647.08
		Flowav - AV Sensor	2017	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	6	$ 10,482.70
		Flowav - AV Sensor	2018	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	2	$ 3,600.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		Flowav - AV Sensor	2019	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	5	$ 9,117.16
		Flowav - Ultrasonic	2019	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	4	$ 4,052.07
		Hach - AV Sensor	2016	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	10	$ 13,084.98
		Hach - Downlooker	2016	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	1	$ 1,308.50
		Hach - FL900	2014	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	7	$ 37,235.04
		Hach - FL901	2016	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	19	$ 106,549.09
		Hach - Flodar	2013	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	1	$ 6,904.36
		Hach - Flodar	2016	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	1	$ 7,477.13
		Hach - Module	2016	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	1	$ 841.18
		Hach - Ultrasonic	2017	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	1	$ 1,067.68

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		Hach - Wafer Sensor	2014	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	3	$ 1,329.82
		Hach - Wafer Sensor	2018	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	1	$ 500.00
		Isco - 2150	2014	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	2	$ 7,092.39
		Isco - 2151	2016	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	1	$ 3,738.56
		Isco - 2152	2019	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	6	$ 24,312.42
		Isco - 4120	2016	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	1	$ 3,738.56
		Isco - AV Sensor	2011	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	5	$ 5,329.51
		Isco - AV Sensor	2016	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	2	$ 2,430.07
		Isco - AV Sensor	2019	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	8	$ 10,535.38
		Telog - Ru-33	2012	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	1	$ 2,103.37

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		Telog - Ru-34	2016	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	2	$ 4,673.21
		Telog - RU-33/4G	2019	DELCORA	Meters with no year and older than 2011 are assumed to no longer be in service. Original Cost data was estimated in 2019 numbers and backdated to the respective year.	118	$ 298,840.17
	TOTAL FLOW MEASURING DEVICES					**250**	**$ 634,716.65**
365.20	FLOW MEASURING INSTALLATIONS						
		Lower Chichester Metering Pit - Metering pit @ Marcus Hook & Lower Chi border for gravity flow.	1977		Assume vault is 1/2 size of regulator vault and was constructed at the same time as the Sun-Marcus Hook FM to the WRTP.		$ 12,625.00
	TOTAL FLOW MEASURING INSTALLATIONS						**$ 12,625.00**
371.30	PUMPING EQUIPMENT						
PS-1		(PS-1) - 1/2" Bar Screen	2017	Weston			$ 740,881.00
PS-1		(PS-1) - Bar Screen Repl #1	2002	Weston			$ 260,000.00
PS-1		(PS-1) - Bar Screen Repl #2	1995	Weston			$ 239,000.00
PS-1		(PS-1) - CFM Valve Repl	2009	Weston			$ 1,532,000.00
PS-2		(PS-2) - Upgraded to twin submersible pumps	1997	Weston			$ 76,900.00
PS-7		(PS-7) - 1/2" Bar Screen	2017	Weston			$ 816,146.00
PS-7		(PS-7) - Bar Screen Repl #1	1995	Weston			$ 239,000.00
PS-7		(PS-7) - Bar Screen Repl #2	1997	Weston			$ 207,900.00
PS-7		(PS-7) - Control System Upgrade	2013	Weston			$ 256,784.00
PS-8		(PS-8) - 1/2" Bar Screen	2017	Weston			$ 675,635.00
PS-8		(PS-8) - Bar Screen Repl #1	1999	Weston			$ 157,932.00
PS-8		(PS-8) - Bar Screen Repl #2	1996	Weston			$ 149,500.00
PS-9		(PS-9) - 1/2" Bar Screen	2017	Weston			$ 827,058.00
PS-9		(PS-9) - Bar Screen Repl #1	1994	Weston			$ 163,400.00
PS-9		(PS-9) - Bar Screen Repl #2	1998	Weston			$ 210,480.00
PS-9		(PS-9) - DCPS Upgrade: (Part A) Struct/Mech, (Part B) Elect, (Part C) HVAC	2006	Weston			$ 3,784,877.00
PS-11		(PS-11) - Gen & Elect Imp.	1977	Contract Nos 13, 13A, 14 (1977 upgrade)			$ 168,026.00
PS-16		(PS-16) - 3rd pump added	1975	Contract 25			$ 17,787.00
PS-16		(PS-16) - pump control upgrades	2017	Capital Plan			$ 200,000.00
PS-27		(PS-27) - Gen & Elect Imp.	2013	Weston			$ 318,995.00
	TOTAL PUMPING EQUIPMENT						**$ 11,042,301.00**
380.30	TREATMENT AND DISPOSAL EQUIPMENT - PUMP STATIONS						
PS-1 & PS-2 (Primary Sludge)		PS-1 & PS-2 (Primary Sludge) - Original Installation	1974	Original plant construction			$ 206,632.00
PS-1 & PS-2 (Primary Sludge)		PS-1 & PS-2 (Primary Sludge) - PS Improvements	2018	TC-1717-C			$ 308,780.00
PS-3 (Activated Sludge)		PS-3 (Activated Sludge) - Original Installation	1974	Original plant construction			$ 2,090,502.00
PS-3 (Activated Sludge)		PS-3 (Activated Sludge) - Process Control System Phase 2	2005	TC-0403-C			$ 5,414,119.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
	PS-3 (Activated Sludge)	PS-3 (Activated Sludge) - Process Control System, Phase 1	2002	TC-0211-C			$ 791,877.00
	PS-3 (Activated Sludge)	PS-3 (Activated Sludge) - PS-3 Improvements	2018	TC-1717-C			$ 3,894,326.00
	PS-3 (Activated Sludge)	PS-3 (Activated Sludge) - RAS Line Replacement	2003	TC-0312-C			$ 1,102,245.00
	PS-4 (Chlorine Bldg & Utility Water)	PS-4 (Chlorine Bldg & Utility Water) - Modifications To Chlorine Facility	1998	TC-9806-C			$ 343,000.00
	PS-4 (Chlorine Bldg & Utility Water)	PS-4 (Chlorine Bldg & Utility Water) - Original Installation	1974	Original plant construction			$ 487,831.00
	PS-4 (Chlorine Bldg & Utility Water)	PS-4 (Chlorine Bldg & Utility Water) - PS-4 Improvements	2018	TC-1717-C			$ 945,740.00
	PS-5 (Activated Sludge)	PS-5 (Activated Sludge) - Original Installation	1994	TC-9309-C			$ 5,563,800.00
	PS-6 (Raw Influent)	PS-6 (Raw Influent) - Improvements	2018	TC-1717-C			$ 496,184.00
	PS-6 (Raw Influent)	PS-6 (Raw Influent) - Phase 1	2017	Original plant construction			$ 13,923,660.00
	PS-6 (Raw Influent)	PS-6 (Raw Influent) - Phase 2	2018	TC-1717-C			$ 1,398,201.00
	Corrine Village aka Pocopson Preserve	Corrine Village aka Pocopson Preserve WWTP - INFLUENT PUMP STATION	2010	2018 appraisel number, backdated to the correct year.			$ 54,643.24
	Sheeder Tract aka Riverside	Sheeder Tract aka Riverside WWTP - INFLUENT PUMP STATION	2007	2018 appraisel number, backdated to the correct year.			$ 49,465.14
	TOTAL TREATMENT AND DISPOSAL EQUIPMENT - PUMP STATIONS						**$ 37,071,005.38**
380.40	TREATMENT AND DISPOSAL EQUIPMENT						
		0 - Mixing Manifold Installation	2006	TC-0615-C			$ 73,690.00
	B-3 (Incinerator)	B-3 (Incinerator) - Ash Scrubber Line Replacement	2005	TC-0406-C			$ 257,400.00
	B-3 (Incinerator)	B-3 (Incinerator) - Ash Scrubber Pumping System Upgrade	2007	TC-0616-C			$ 411,422.00
	B-3 (Incinerator)	B-3 (Incinerator) - Ash System Clinker Grinder	2008	P2008-09			$ 27,780.00
	B-3 (Incinerator)	B-3 (Incinerator) - Automation of Solids Handling Equipment	2007	TC-0708-C			$ 253,109.00
	B-3 (Incinerator)	B-3 (Incinerator) - Belt Filter Press Controls Optimization	2010	TC-1002-C			$ 62,750.00
	B-3 (Incinerator)	B-3 (Incinerator) - Belt Filter Press Reconditioning	2014	TC-1401-C			$ 537,300.00
	B-3 (Incinerator)	B-3 (Incinerator) - BFP Odor Control in B-3	2003	TC-0310-C			$ 474,845.00
	B-3 (Incinerator)	B-3 (Incinerator) - Building Improvements	2018	TC-1717-C			$ 129,832.00
	B-3 (Incinerator)	B-3 (Incinerator) - CEMS Installation	1999	TC-9906-C			$ 248,950.00
	B-3 (Incinerator)	B-3 (Incinerator) - Chlorine Scrubbing System Modifications	2008	TC-0805-C			$ 67,200.00
	B-3 (Incinerator)	B-3 (Incinerator) - Dry Ash Handling System (Psc)	1991	TC-9105-C			$ 1,150,730.00
	B-3 (Incinerator)	B-3 (Incinerator) - Fabrication - 42" Stack/Breaching ID Fan	1988	TC-8810-C	Contract changed from PW to Purchasing - #P88-14		$ 16,390.00
	B-3 (Incinerator)	B-3 (Incinerator) - Fourth Belt Filter Press	2014	TC-1402-C			$ 548,000.00
	B-3 (Incinerator)	B-3 (Incinerator) - Furnish & Install Additional Burners For Incinerator #1	1996	TC-9602-C			$ 123,865.00
	B-3 (Incinerator)	B-3 (Incinerator) - HVAC For The Belt Filter Press Room	2007	TC-0710-C			$ 19,817.00
	B-3 (Incinerator)	B-3 (Incinerator) - ID Fan & Stack Installation	1982	TC-8203-P			$ 19,790.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
	B-3 (Incinerator)	B-3 (Incinerator) - Inc. #2 Burner Upgraded & Repair	2006	TC-0603-C			$ 249,127.00
	B-3 (Incinerator)	B-3 (Incinerator) - Incinerator Ash System and Center Drive Repair	2014	TC-1313-C			$ 902,770.00
	B-3 (Incinerator)	B-3 (Incinerator) - Incinerator Natural Gas Conversion & PLC Instrumentation Conversion	2011	TC-1105-C			$ 2,315,000.00
	B-3 (Incinerator)	B-3 (Incinerator) - Incinerator Oxygen Monitor	1991	TC-9107-C			$ 27,970.00
	B-3 (Incinerator)	B-3 (Incinerator) - Incinerator Platform Improvement	2005	TC-0507-C			$ 94,000.00
	B-3 (Incinerator)	B-3 (Incinerator) - Incinerator Secondary Combustion Chamber & Wet Scrubber	2015	TC-1314-C			$ 10,745,000.00
	B-3 (Incinerator)	B-3 (Incinerator) - Install ID Fan & Breaching	1988	TC-8809-C			$ 56,375.00
	B-3 (Incinerator)	B-3 (Incinerator) - Install Sludge/BFP Dewatering Syst.	1991	TC-9103-C			$ 1,118,000.00
	B-3 (Incinerator)	B-3 (Incinerator) - Installation of ID Fan #2 and Scrubber #2	2005	TC-0509-C			$ 155,500.00
	B-3 (Incinerator)	B-3 (Incinerator) - Modifications To Building B-3	1985	TC-8504-C			$ 78,800.00
	B-3 (Incinerator)	B-3 (Incinerator) - Odor Control System Installation	1982	TC-8205-C			$ 59,975.00
	B-3 (Incinerator)	B-3 (Incinerator) - Original Installation	1974	Original plant construction			$ 7,022,148.00
	B-3 (Incinerator)	B-3 (Incinerator) - Overhaul #2 Incin/Install Add'L Burners	1997	TC-9705-C			$ 273,885.00
	B-3 (Incinerator)	B-3 (Incinerator) - Procurement & Installation of Odor Control Equipment	1992	TC-9114-C			$ 85,800.00
	B-3 (Incinerator)	B-3 (Incinerator) - Redundant Continuous Emissions Monitor and Data Acquisition System	2005	TC-0512-C			$ 389,800.00
	B-3 (Incinerator)	B-3 (Incinerator) - Scrubber Drain Piping Revisions-Incin. #2	1990	TC-9004-C			$ 9,987.00
	B-3 (Incinerator)	B-3 (Incinerator) - Sludge Conveyor System Modifications	2014	TC-1315-C			$ 309,900.00
	B-4 (Thickening)	B-4 (Thickening) - B-4 HVAC	1988	TC-8811-C			$ 114,800.00
	B-4 (Thickening)	B-4 (Thickening) - Building B-4 Structural Rehabilitation	2011	TC-1104-C			$ 1,242,745.00
	B-4 (Thickening)	B-4 (Thickening) - GBT Elec/Instr/Controls	2012	TC-1109-C			$ 1,879,083.45
	B-4 (Thickening)	B-4 (Thickening) - Grease & Odor Control System	2013	TC-1306-C			$ 3,390,558.80
	B-4 (Thickening)	B-4 (Thickening) - Installation of a Shaftless Screw Conveyor and Screen for Grease Offloading	2008	TC-0807-C			$ 157,200.00
	B-4 (Thickening)	B-4 (Thickening) - Original Installation	1974	Original plant construction			$ 1,048,450.00
	B-4 (Thickening)	B-4 (Thickening) - Primary Scum & Grease Transfer Piping	2009	TC-0908-C			$ 126,700.00
	B-4 (Thickening)	B-4 (Thickening) - Sludge and Grease Handling Systems Piping Modifications	2008	TC-0808-C			$ 257,820.00
	B-4 (Thickening)	B-4 (Thickening) - Sludge Screening Unit	2008	P2008-10			$ 154,300.00
	B-4 (Thickening)	B-4 (Thickening) - Solids Handling Upgrade FOG Building	2017	TC-1608-C			$ 5,062,323.00
	B-6 (Blower)	B-6 (Blower) - 4Th Blower Addition	2015	TC-1503-C			$ 1,191,400.00
	B-6 (Blower)	B-6 (Blower) - Building Improvements	2018	TC-1717-C			$ 124,730.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
	B-6 (Blower)	B-6 (Blower) - Induction Motor For Aeration Blower	2009	P2009-04			$ 51,740.00
	B-6 (Blower)	B-6 (Blower) - Original Installation	2003	TC-0307-C			$ 984,590.00
	Bulkhead	Bulkhead - Original Installation	1974	Original plant construction			$ 938,263.00
	Construction of an Alternate Road for WRTP	Construction of an Alternate Road for WRTP - Original Installation	2000	TC-9908-C			$ 206,636.25
	EB-2 & ET-1 to ET-4 (Sludge Storage)	EB-2 & ET-1 to ET-4 (Sludge Storage) - Blowers For Sludge Holding Tank	2007	P2006-23			$ 38,714.00
	EB-2 & ET-1 to ET-4 (Sludge Storage)	EB-2 & ET-1 to ET-4 (Sludge Storage) - Hauled Sludge Screening Unit	2008	P2008-10			$ 154,300.00
	EB-2 & ET-1 to ET-4 (Sludge Storage)	EB-2 & ET-1 to ET-4 (Sludge Storage) - Installation of Primary Sludge Monitoring Level Detectors	2008	TC-0804-C			$ 102,063.00
	EB-2 & ET-1 to ET-4 (Sludge Storage)	EB-2 & ET-1 to ET-4 (Sludge Storage) - MCC For Sludge Blowers	2007	P2007-03			$ 14,200.00
	EB-2 & ET-1 to ET-4 (Sludge Storage)	EB-2 & ET-1 to ET-4 (Sludge Storage) - Original Installation acquired from City of Chester	1939		Converted to sludge storage as part of WRTP construction. Conversion included above. Oct 2006 cost opinion = $2,211,275		$ 66,200.80
	EB-2 & ET-1 to ET-4 (Sludge Storage)	EB-2 & ET-1 to ET-4 (Sludge Storage) - Sludge Mixing And Pumping	2008	DELCORA			$ 369,853.00
	Emergency Paging System	Emergency Paging System - Original Installation	2003	DELCORA			$ 143,700.00
	Energy Conservation	Energy Conservation - Lighting Improvements	2010	TP-1003-C			$ 235,000.00
	Generator	Generator - Original Installation	2015	DELCORA			$ 265,000.00
	Hauled Waste Acceptance Facility	Hauled Waste Acceptance Facility - Original Installation	2013	TC-1311-C			$ 1,083,800.00
	Key Card System at WRTP	Key Card System at WRTP - Original Installation	2000	DELCORA			$ 18,785.00
	Pit 1 (Valve)	Pit 1 (Valve) - Original Installation	1974	Original plant construction			$ 76,840.00
	Pit 2 (Mag Meter)	Pit 2 (Mag Meter) - Original Installation	1974	Original plant construction			$ 77,049.00
	Pit 3 (Mag Meter)	Pit 3 (Mag Meter) - Original Installation	1974	Original plant construction			$ 38,214.00
	Pit 4 (Sludge Receiving Station)	Pit 4 (Sludge Receiving Station) - Original Installation	1974	Original plant construction			$ 33,586.00
	Pit 5 (Potable Water)	Pit 5 (Potable Water) - Original Installation	1974	Original plant construction			$ 22,283.00
	Plant Electrical Distribution	Plant Electrical Distribution - Improvements	2018	TC-1717-C	Includes poles & 15kV duct bank		$ 856,766.00
	Plant Electrical Distribution	Plant Electrical Distribution - Original Installation	1974	Original plant construction			$ 573,678.00
	Primary Switchgear	Primary Switchgear - Electrical Improvements	2005	DELCORA			$ 62,849.00
	Primary Switchgear	Primary Switchgear - Original Installation	1974	Original plant construction			$ 131,535.00
	RAS Line	RAS Line - RAS Line Replacement	2003	TC-0312-C			$ 1,102,245.00
	Replace Fencing at WRTP	Replace Fencing at WRTP - N/A	2001	TC&CD-0102-C			$ 163,319.00
	S-2 (Plant Outfall)	S-2 (Plant Outfall) - Installation of Effluent Flow Totalizers	2009	PEW-0909-C			$ 20,597.00
	S-2 (Plant Outfall)	S-2 (Plant Outfall) - Original Installation	1974		Included in Bulkhead above		$ -
	Substation #1	Substation #1 - 480V Distribution/Improvements	2018	TC-1717-C			$ 1,369,482.00
	Substation #2	Substation #1 - Original Installation	1974	Original plant construction			$ 409,494.00
	Substation #3	Substation #1 - Replacement of 480V Underground Cable from Substation #1 to EPS-1	2011	TC-1108-C			$ 126,890.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
	Substation #2 (old sub-2 & sub 3)	Substation #2 (old sub-2 & sub 3) - Improvements	2019	TC-1717-C			$ 130,764.00
	Substation #2 (old sub-2 & sub 3)	Substation #2 (old sub-2 & sub 3) - Original Installation	1974	Original plant construction			$ 331,747.00
	Substation #2 (old sub-2 & sub 3)	Substation #2 (old sub-2 & sub 3) - WRTP Substation No. 2 Replacement	2019	TC-1904-C			$ 1,442,777.00
	Substation #3 (old sub-4)	Substation #3 (old sub-4) - 480V Distribution/Improvements	2018	TC-1717-C			$ 1,039,262.00
	Substation #3 (old sub-4)	Substation #3 (old sub-4) - Original Installation	1974	Original plant construction			$ 316,329.00
	T-1 & T-2 (Grit)	T-1 & T-2 (Grit) - Gate/Valve Improvements	2018	TC-1717-C			$ 299,664.00
	T-1 & T-2 (Grit)	T-1 & T-2 (Grit) - Grit Tank Screens	2017	TC-1608-C			$ 3,266,432.00
	T-1 & T-2 (Grit)	T-1 & T-2 (Grit) - Original Installation	1974	Original plant construction			$ 1,350,598.00
	T-11 to T-14 (Aeration)	T-11 to T-14 (Aeration) - Aeration Panel Replacement	2012	TC-1204-C			$ 1,143,000.00
	T-11 to T-14 (Aeration)	T-11 to T-14 (Aeration) - Aeration Panels	2016	TC-1601-C			$ 3,980,000.00
	T-11 to T-14 (Aeration)	T-11 to T-14 (Aeration) - Aeration System Upgrades	2004	TC-0307-C			$ 4,285,650.00
	T-11 to T-14 (Aeration)	T-11 to T-14 (Aeration) - Install Submersible Aerators	1991	TC-9104-C			$ 92,861.00
	T-11 to T-14 (Aeration)	T-11 to T-14 (Aeration) - Original Installation	1974	Original plant construction			$ 6,247,180.00
	T-11 to T-14 (Aeration)	T-11 to T-14 (Aeration) - Tank Improvements	2018	TC-1717-C			$ 3,047,789.00
	T-15 to T-18 (Secondary Clarifiers)	T-15 to T-18 (Secondary Clarifiers) - Clarifier Pipe Lining	2011	TC-1107-C			$ 986,000.00
	T-15 to T-18 (Secondary Clarifiers)	T-15 to T-18 (Secondary Clarifiers) - Clarifier T-18 Equipment Replacement	2016	TC-1704-C			$ 1,024,500.00
	T-15 to T-18 (Secondary Clarifiers)	T-15 to T-18 (Secondary Clarifiers) - Original Installation	1974	Original plant construction			$ 3,420,075.00
	T-15 to T-18 (Secondary Clarifiers)	T-15 to T-18 (Secondary Clarifiers) - Overhaul Clarifier Tank T-17	1999	TC-9902-C			$ 172,805.00
	T-15 to T-18 (Secondary Clarifiers)	T-15 to T-18 (Secondary Clarifiers) - Overhaul Clarifier Tank T-18	1997	TC-9703-C			$ 173,000.00
	T-15 to T-18 (Secondary Clarifiers)	T-15 to T-18 (Secondary Clarifiers) - Repairs To Clarifier T-15	2000	TC-9910-C			$ 179,071.00
	T-15 to T-18 (Secondary Clarifiers)	T-15 to T-18 (Secondary Clarifiers) - Repairs To Clarifier T-16	2002	TC-0105-C			$ 210,439.00
	T-15 to T-18 (Secondary Clarifiers)	T-15 to T-18 (Secondary Clarifiers) - T-15 Thru T-17 Equipment	2018	TC-1717-C			$ 2,453,732.00
	T-19 to T-20 (Post Aeration)	T-19 to T-20 (Post Aeration) - FRP Baffle Walls	2018	TC-1717-C			$ 60,000.00
	T-19 to T-20 (Post Aeration)	T-19 to T-20 (Post Aeration) - Original Installation	1974	Original plant construction			$ 260,705.00
	T-21 to T-22 (Chlorine Contact)	T-21 to T-22 (Chlorine Contact) - Chlorine Equipment: Procure & Install	1992	TC-9204-C			$ 89,980.00
	T-21 to T-22 (Chlorine Contact)	T-21 to T-22 (Chlorine Contact) - Furnish/Install Chlorination Equip.	1991	TC-9112-C			$ 83,940.00
	T-21 to T-22 (Chlorine Contact)	T-21 to T-22 (Chlorine Contact) - Original Installation	1974	Original plant construction			$ 733,940.00
	T-21 to T-22 (Chlorine Contact)	T-21 to T-22 (Chlorine Contact) - Tank Improvements	2018	TC-1717-C			$ 599,197.00
	T-23 to T-26 (Inside B-4)	T-23 to T-26 (Inside B-4) - Original Installation	1974	Original plant construction			$ 2,616,573.00
	T-27 (Secondary Clarifier)	T-27 (Secondary Clarifier) - Original Installation	1994	TC-9309-C	Included in PS-5 above		$ -

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
	T-27 (Secondary Clarifier)	T-27 (Secondary Clarifier) - T-27 Weir Adjustment	2007	TC-0711-C			$ 19,950.00
	T-3 to T-10 (Primary Clarifiers)	T-3 to T-10 (Primary Clarifiers) - Installation of Primary Sludge Monitoring Level Detectors	2008	TC-0804-C			$ 102,063.00
	T-3 to T-10 (Primary Clarifiers)	T-3 to T-10 (Primary Clarifiers) - Original Installation	1974	Original plant construction			$ 3,445,796.00
	T-3 to T-10 (Primary Clarifiers)	T-3 to T-10 (Primary Clarifiers) - Primary Influent Aeration Channel Upgrade	2014	TC-1404-C			$ 144,500.00
	T-3 to T-10 (Primary Clarifiers)	T-3 to T-10 (Primary Clarifiers) - Tank Improvements	2018	TC-1717-C			$ 2,043,938.00
	Trench Duct Installation	Trench Duct Installation - Trench Duct Installation (Communication Raceway)	2002	TC-0110-C			$ 540,000.00
	Utility Water Distribution System	Utility Water Distribution System - Plant Utility Water System Upgrade	2016	TC-1506-C			$ 5,055,023.00
	Utility Water Distribution System	Utility Water Distribution System - Utility Water Line Replacement	1988	TC-8804-C			$ 129,550.00
	Valve Pit	Valve Pit - Construction Of Concrete Valve Pit & Valve Installation	1984	TC-8403-C			$ 55,834.00
	Yard Piping	Yard Piping - Original Installation	1974	Original plant construction			$ 75,982.00
	SPRINGHILL FARMS WWTP	SPRINGHILL FARMS WWTP WWTP - Initial facility cost including pump station, building , generator, fencing, paving, etc.	1988	Estimate			$ 725,000.00
	Corrine Village aka Pocopson Preserve	Corrine Village aka Pocopson Preserve WWTP - GENERATOR W/ FUEL TANK	2010	2018 appraisel number, backdated to the correct year.			$ 34,546.91
	Corrine Village aka Pocopson Preserve	Corrine Village aka Pocopson Preserve WWTP - MISC ELECTRICAL AND INSTRUMENTATION EQUIPMENT	2010	2018 appraisel number, backdated to the correct year.			$ 30,360.04
	Corrine Village aka Pocopson Preserve	Corrine Village aka Pocopson Preserve WWTP - SPRAY SYSTEM	2010	2018 appraisel number, backdated to the correct year.			$ 7,129.86
	Sheeder Tract aka Riverside	Sheeder Tract aka Riverside WWTP - GENERATOR W/ FUEL TANK	2007	2018 appraisel number, backdated to the correct year.			$ 31,273.18
	Sheeder Tract aka Riverside	Sheeder Tract aka Riverside WWTP - MISC ELECTRICAL AND INSTRUMENTATION EQUIPMENT	2007	2018 appraisel number, backdated to the correct year.			$ 27,483.06
	Sheeder Tract aka Riverside	Sheeder Tract aka Riverside WWTP - SPRAY SYSTEM	2007	2018 appraisel number, backdated to the correct year.			$ 6,454.22
	TOTAL TREATMENT AND DISPOSAL EQUIPMENT						**$ 105,317,582.56**
390.70	COMPUTER AND SOFTWARE						
		Backup - Barracuda_Admin	2016	DELCORA	All servers assumed to be 3 years old.		$ 8,000.00
		Backup - Barracuda_Plant	2016	DELCORA	All servers assumed to be 3 years old.		$ 8,000.00
		CISCO Switch - ASA5516X	2016	DELCORA	All servers assumed to be 3 years old.		$ 2,350.00
		CISCO Switch - ASA 5516x	2016	DELCORA	All servers assumed to be 3 years old.		$ 2,350.00
		Email Archiver - Jatheon	2016	DELCORA	All servers assumed to be 3 years old.		$ 6,000.00
		Firewall - AdminASA5512	2016	DELCORA	All servers assumed to be 3 years old.		$ 4,800.00
		Firewall - PlantASA5512	2016	DELCORA	All servers assumed to be 3 years old.		$ 11,000.00
		Meraki Switch - Incin Switch	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,500.00
		Proliant DL 360G7 - Plant_ESX2	2016	DELCORA	All servers assumed to be 3 years old.		$ 4,000.00
		Proliant DL380-G7 - Plant_ESX1	2016	DELCORA	All servers assumed to be 3 years old.		$ 4,000.00
		Router - Plant_Router	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,820.00
		Router Cisco - Admin2610XM.delcora.org	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,820.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		Router Cisco - Plant1760	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,000.00
		SAN - Admin-emc	2016	DELCORA	All servers assumed to be 3 years old.		$ 8,000.00
		SAN - Plant SAN	2016	DELCORA	All servers assumed to be 3 years old.		$ 16,000.00
		SAN - Plant_San	2016	DELCORA	All servers assumed to be 3 years old.		$ 15,000.00
		SAN - Drobo	2016	DELCORA	All servers assumed to be 3 years old.		$ 10,000.00
		SAN - B2_SAN	2016	DELCORA	All servers assumed to be 3 years old.		$ 20,000.00
		Server - VISION	2016	DELCORA	All servers assumed to be 3 years old.		$ 6,000.00
		Server - LTCP-SERVER	2016	DELCORA	All servers assumed to be 3 years old.		$ 3,000.00
		Server - VIBRATIONSRV-02	2016	DELCORA	All servers assumed to be 3 years old.		$ 2,500.00
		Server - MONITOR	2016	DELCORA	All servers assumed to be 3 years old.		$ 2,500.00
		Server - ESXi-01-1	2016	DELCORA	All servers assumed to be 3 years old.		$ 5,000.00
		Server - ESXi-02-2	2016	DELCORA	All servers assumed to be 3 years old.		$ 5,000.00
		Server - ESXi-03-3	2016	DELCORA	All servers assumed to be 3 years old.		$ 5,000.00
		Server - ESX2-Plant	2016	DELCORA	All servers assumed to be 3 years old.		$ 5,000.00
		Server - ESX-Plant	2016	DELCORA	All servers assumed to be 3 years old.		$ 5,000.00
		Server + VMware - TRITONMNGR	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - ADMINPRINTSRV	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - WEBSENSEDB	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - ADMINSRV	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - APPSERVER2	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - APPSERVER3	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - FILESERVER	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - GISAPP	2016	DELCORA	All servers assumed to be 3 years old.		$ 2,200.00
		Server + VMware - INFORAPP	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - INFORREPORT	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - GISDATA	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - INFORDATA	2016	DELCORA	All servers assumed to be 3 years old.		$ 2,200.00
		Server + VMware - MAILSRV	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - PLANTSRV	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - ADMINPRINT2	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - INFORTEST	2016	DELCORA	All servers assumed to be 3 years old.		$ 2,200.00
		Server + VMware - PLANTR2SRV	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - VCENTER2	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - IMAGEAPP	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - IMAGEDATA	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - CEMS01P20110758	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - CEMS02P20110758	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - Eopsdata18_VM	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - Eopsweb18_VM	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - Historian_VM	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - NewPC1_VM	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server + VMware - VEEAM Server	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Server - NewPCS2	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,000.00
		ESX Server - HPE PROLIANT SERVER	2016	DELCORA	All servers assumed to be 3 years old.		$ 39,519.68
		STORAGE - HP SAN	2016	DELCORA	All servers assumed to be 3 years old.		$ 46,138.00
		Switch - Admin_MDF_SW2	2016	DELCORA	All servers assumed to be 3 years old.		$ 2,300.00
		Switch - VMware_Switch.delcora2000.org	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,100.00
		Switch - SAN_SWITCH	2016	DELCORA	All servers assumed to be 3 years old.		$ 2,300.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		Switch - Plant_B2	2016	DELCORA	All servers assumed to be 3 years old.		$ 3,000.00
		Switch - Plant B2	2016	DELCORA	All servers assumed to be 3 years old.		$ 3,000.00
		Switch - Blower Build	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,500.00
		Switch - Plant_B5	2016	DELCORA	All servers assumed to be 3 years old.		$ 3,000.00
		Switch - PlantTrailer	2016	DELCORA	All servers assumed to be 3 years old.		$ 1,500.00
		UCSC-C220-M3SBE - UCS_Server	2016	DELCORA	All servers assumed to be 3 years old.		$ 10,000.00
	TOTAL COMPUTER AND SOFTWARE						**$ 311,997.68**
391.70	TRANSPORTATION EQUIPMENT						
		2004 FORD F550 TEREX TELELECT TL36P (#4001)	2004	DELCORA		1	$ 83,805.00
		2006 FORD TRUCK F-350 (#0502)	2005	DELCORA		1	$ 23,242.00
		2006 FORD TRUCK F-150 (#0601)	2006	DELCORA		1	$ 18,250.00
		2007 FORD TRUCK (#0604)	2006	DELCORA		1	$ 19,300.00
		2008 ESCAPE 4WD (#0702)	2007	DELCORA		1	$ 15,337.00
		2008 ESCAPE 4WD (#0703)	2007	DELCORA		1	$ 15,337.00
		2008 ESCAPE 4WD (#0704)	2007	DELCORA		1	$ 15,337.00
		2008 FORD TRUCK S-DTY F-350 (#0706)	2007	DELCORA		1	$ 15,127.00
		2008 FORD TRUCK S-DTY F-250 (#0707)	2007	DELCORA		1	$ 28,298.00
		2008 FORD TRUCK - F-250 (#0709)	2007	DELCORA		1	$ 18,470.00
		2008 FORD ESCAPE (#0801)	2008	DELCORA		1	$ 24,615.00
		2008 FORD ESCAPE (#0802)	2008	DELCORA		1	$ 16,144.00
		2008 FORD ESCAPE (#0803)	2008	DELCORA		1	$ 16,144.00
		2008 FORD TRUCK - F250 (#0804)	2008	DELCORA		1	$ 18,595.00
		2008 FORD TRUCK - F250 (#0805)	2008	DELCORA		1	$ 18,595.00
		2009 FORD TRUCK (#0902)	2009	DELCORA		1	$ 43,699.00
		2010 INTERNATIONAL TRUCK (#0903)	2009	DELCORA		1	$ 180,492.80
		2008 FREIGHTLINER (#0904)	2008	DELCORA		1	$ 149,689.00
		2010 FORD TRUCK RANGER (#0905)	2009	DELCORA		1	$ 17,511.87
		2010 FORD TRUCK RANGER (#0906)	2009	DELCORA		1	$ 17,511.87
		2010 FORD TRUCK RANGER (#0908)	2009	DELCORA		1	$ 17,511.87
		2010 FORD TRUCK RANGER (#0909)	2009	DELCORA		1	$ 25,182.84
		2011 FORD F350 TRUCK (#1101)	2011	DELCORA		1	$ 21,532.34
		2011 FORD F350 TRUCK (#1102)	2011	DELCORA		1	$ 21,532.34
		2011 FORD F350 TRUCK (#1103)	2011	DELCORA		1	$ 21,532.34
		2011 FORD F350 TRUCK (#1104)	2011	DELCORA		1	$ 25,117.70
		2012 FORD F-250 PICKUP TRUCK (#1201)	2012	DELCORA		1	$ 23,663.00
		2012 FORD F-250 PICKUP TRUCK (#1202)	2012	DELCORA		1	$ 23,663.00
		2012 FORD F-250 PICKUP TRUCK (#1203)	2012	DELCORA		1	$ 23,663.00
		2012 FORD VAN (#1204)	2012	DELCORA		1	$ 21,542.95
		2012 FORD F-450 TRUCK (#1205)	2012	DELCORA		1	$ 53,393.01
		2013 FORD ESCAPE (#1301)	2012	DELCORA		1	$ 23,220.00
		2014 FORD F-250 TRUCK (#1302)	2013	DELCORA		1	$ 24,760.22
		2014 FORD F-350 TRUCK (#1303)	2013	DELCORA		1	$ 28,115.00
		2014 FORD F450 TRUCK (DUMP) (#1401)	2014	DELCORA		1	$ 45,982.00
		2014 FORD ESCAPE (#1402)	2014	DELCORA		1	$ 24,732.00
		2008 CASE BACKHOE (#BH)	2008	DELCORA		1	$ 108,053.00
		2016 INTERNATIONAL (VAC) (#1601)	2016	DELCORA		1	$ 93,050.59
		2016 FORD TRANSIT VAN (#1602)	2016	DELCORA		1	$ 22,271.00
		2016 FORD F-150 CREW CAB (#1603)	2016	DELCORA		1	$ 29,199.00
		2017 FORD ESCAPE (#1604)	2016	DELCORA		1	$ 22,754.00
		2017 FORD ESCAPE (#1605)	2016	DELCORA		1	$ 22,754.00

ACCOUNT	LOCATION	ASSET	YEAR	SOURCE	COMMENTS	QUANTITY	ORIGINAL COST
		2017 FORD ESCAPE (#1606)	2016	DELCORA		1	$ 22,754.00
		2017 FORD ESCAPE (#1607)	2016	DELCORA		1	$ 22,954.00
		2017 FORD ESCAPE (#1608)	2016	DELCORA		1	$ 22,754.00
		2017 FORD ESCAPE (#1609)	2016	DELCORA		1	$ 22,754.00
		2017 FORD EXPLORER (#1610)	2016	DELCORA		1	$ 34,845.00
		2017 FORD F-350 (#1611)	2016	DELCORA		1	$ 25,571.00
		2000 STERLING VAC TRUCK (#9905)	1999	DELCORA		1	$ 263,103.00
		TT MOUNTED GENERATOR (#MOBILGEN2)	2015	DELCORA		1	$ 107,500.00
		2018 FORD F-250 (#1801)	2018	DELCORA		1	$ 26,899.55
		FORD F-350 CREW CAB (#1802)	2018	DELCORA		1	$ 32,236.55
		2018 FORD F-250 (#1803)	2018	DELCORA		1	$ 26,899.55
		2018 FORD F-250 (#1804)	2018	DELCORA		1	$ 26,899.55
		2017 FORD ESCAPE (#1701)	2017	DELCORA		1	$ 23,786.00
		2017 peterbilt PB348 (#1702)	2017	DELCORA		1	$ 245,651.00
		2018 FORD TRANSIT (#1805)	2018	DELCORA		1	$ 214,100.00
		2019 FORD F-250 (#1901)	2019	DELCORA		1	$ 27,179.00
		2019 FORD F-250 (#1902)	2019	DELCORA		1	$ 27,179.00
		2019 FORD F-250 (#1903)	2019	DELCORA		1	$ 27,179.00
		2019 FORD TRANSIT VAN (#1904)	2019	DELCORA		1	$ 28,170.00
		2019 FORD F-550 UTILITY (#1905)	2019	DELCORA		1	$ 48,467.00
		2019 FORD F-150 4x4 SUPERCREW (#1906)	2019	DELCORA		1	$ 42,530.00
		VACTOR (#9905)		DELCORA		1	$ 21,532.34
		Crane/Boom Truck (#2001)		DELCORA		1	$ 92,500.00
		1998 BACKHOE (#0076)	1998	DELCORA		1	$ 54,322.00
		2006 TRUCK (#0605)	2006	DELCORA		1	$ 297,207.00
		CARAVAN (#0701)	2007	DELCORA		1	$ 14,905.00
		2006 TRAILER (#NONE ISSUED)	2009	DELCORA		1	$ 3,985.00
		2012 DUMP TRUCK (#1105)	2011	DELCORA		1	$ 35,146.00
		2012 VACTOR & CHASSIS TRUCK (#1106)	2011	DELCORA		1	$ 85,144.11
		2011 GENERATOR TRAILER (#NONE ISSUED)	2011	DELCORA		1	$ 11,098.00
		2012 TOWMASTER TRAILER (#NONE ISSUED)	2011	DELCORA		1	$ 14,439.00
		2015 F350 4X4 CREW CAB (#1403)	2014	DELCORA		1	$ 32,527.00
		2015 F250 4X4 STD CAB (#1404)	2014	DELCORA		1	$ 25,925.00
		2014 F150 4X4 STD CAB (#1405)	2014	DELCORA		1	$ 23,163.00
		2015 F250 4X4 STD CAB (#1406)	2014	DELCORA		1	$ 33,525.00
		2014 F150 4X4 STD CAB (#1407)	2014	DELCORA		1	$ 29,888.00
		2014 5D CUES DIESEL SPRINTER VAN (#1408)	2014	DELCORA		1	$ 214,905.00
	TOTAL TRANSPORTATION EQUIPMENT					**79**	**$ 3,788,348.39**
396.70	COMMUNICATION EQUIPMENT						
		Antenna's	2016	DELCORA		53	$ 8,350.00
		Cellular RADIO	2016	DELCORA		10	$ 10,000.00
		Ethernet Radio	2016	DELCORA		32	$ 44,655.00
		Licensed Radio's	2016	DELCORA		21	$ 104,050.00
		Spread Spectrum Radio's	2016	DELCORA		9	$ 29,800.00
	TOTAL COMMUNICATION EQUIPMENT					**125**	**$ 196,855.00**
	SYSTEM TOTAL						**$ 263,682,616.27**

APPENDICES

APPENDIX A

SYSTEM MAPS

- **A1 - DELCORA Service Areas**
- **A2 - DELCORA Conveyance System Diagram**
- **A3 - Delaware County Sewage Facilities Served by DELCORA**
- **A4 - DELCORA Pump Stations & WWTP Map (Aerial)**
- **A5 - DELCORA Pump Stations & WWTP Map (TOPO)**
- **A6 - CSO Map**